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"To derive the most pleasure and profit from the garden, make it do its uttermost by heavy manuring, by abundant tillage, and the best of care. Get the best and grow it well."

❖1884❖

A Year's Work

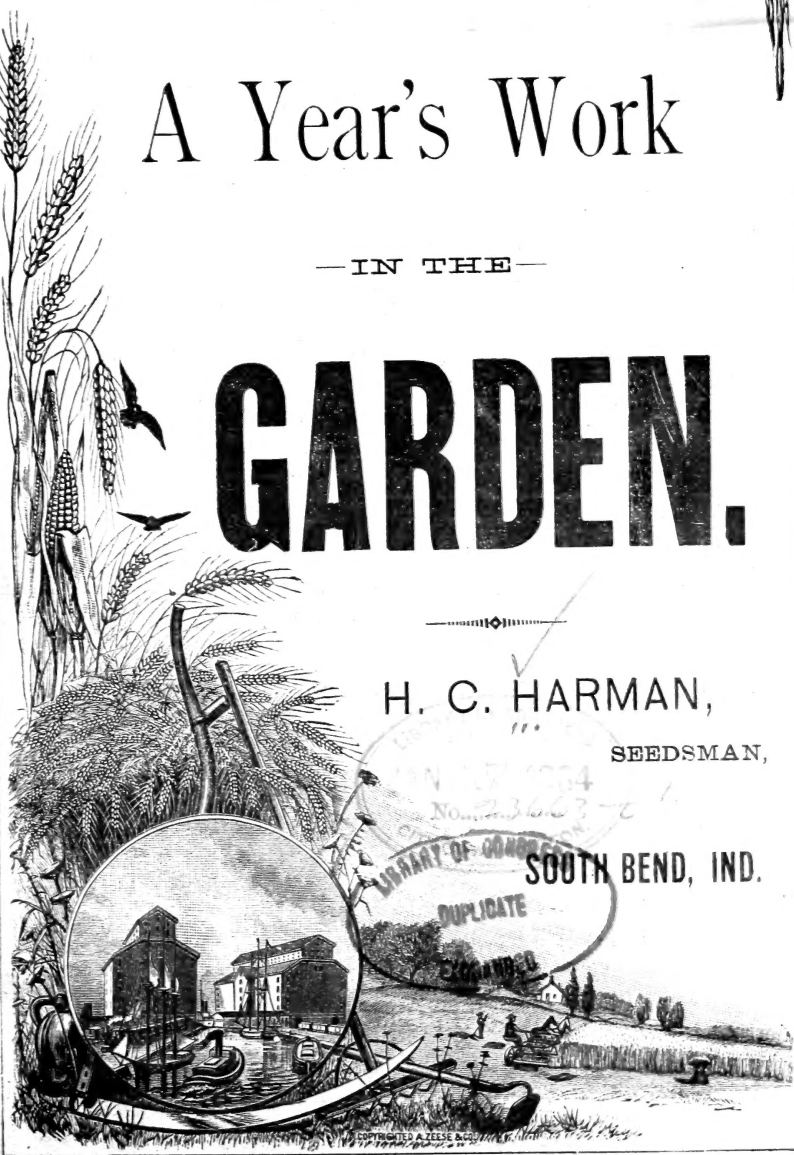
— IN THE —

GARDEN.

H. C. HARMAN,

SEEDSMAN,

SOUTH BEND, IND.



Entered according to Act of Congress, in the year 1883, by H. C. Harman, in the Office of the Librarian of Congress at Washington.

SP-15
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Selected Seeds. —In presenting my Annual Catalogue, I desire to call special attention to the fact that every precaution is taken to have all stocks first-class in every respect; the Seeds I offer are selected with the greatest care; my system of **TESTING SEEDS** is such that guess-work has no place, takes no part in the business. My stock is very complete and prices reasonable. I make it a rule to meet prices of any respectable house, but do not expect to be able to compete with those who offer seeds at low rates without regard to quality. Remember my business has reached its present proportions simply upon the **MERITS** of the goods I send out.

Seeds by Mail. —My system of mailing Seeds is complete, and, in effect, brings a seed counter to every person's door. The greatest care is taken in the packing of orders to insure their traveling any distance without injury, but should accident occur, I will replace anything that may be injured or lost in transit, upon receiving information to that effect. Should deficiency be found in any of the weights or measures, caused by press of business, or otherwise, I hope you will inform me of the fact at once, so that I can make such deficiency good.

Postage on Seeds. —In ordering Seeds by the pound add to the Catalogue price sixteen cents for every pound wanted, and when sending for Seeds by the quart add thirty cents for every quart ordered; but I pay postage to any part of the United States on all Seeds ordered by the packet, ounce or $\frac{1}{4}$ pound, and when ordering by these quantities it is necessary to enclose only the price given in the catalogue.

Use the Order Sheet. —I will consider it a favor if customers will use the enclosed order sheet when making out their orders, thus aiding greatly in the execution of the same. I am always pleased to answer questions from correspondents, but to receive attention they must be put plainly on a separate sheet of paper from the order.

Forward Money With the Order. —Money sufficient to cover the amount of the whole bill must accompany the order. All sums of one dollar and upwards may be sent at my expense, either by Post Office Money Order, Bank Draft, Registered Letter, American Express Company's Money Order, or Postal Note.

At points where American Express Company's Money Order, or Postal Note cannot be obtained, Postage Stamps may be sent, but only in sums of less than one dollar, and they must not be Registered — when the order amounts to more than one dollar the Money must be sent by Registered Letter.

I will be responsible for all loss of money sent me when the above instructions are followed.

Name and Address. —Please remember to write your NAME, POST OFFICE, COUNTY, AND STATE as distinctly as possible. This is very important. Also, it would be best to see that you have put a two cent stamp on envelope, otherwise your Postmaster will hold your order for postage. See that envelope is addressed plainly. **N. C. HARMAN, SOUTH BEND, IND.**

A Word to Market Gardeners. —Owing to close attention to the details of business, prompt filling of orders and sending out none but best quality of seeds, I have gradually secured the trade of a large circle of reliable Market Gardeners—level-headed, sound-minded men, who buy **HARMAN'S SELECTED SEEDS** in preference to all others. A glance over my order book shows that this trade is not confined to any particular locality but comes from every state in the Union. I give this branch of the trade strict personal attention and having had over seventeen years' experience in the business, I hold that I fully understand and appreciate the wants of my customers in this line. I issue a *Special Price List* to which all Market Gardeners are entitled, and if the list is not found with this catalogue, I shall esteem it a kindness, if you will write to me for it, or if you prefer to send me a list of what you want, I shall take pleasure in quoting prices.

A YEAR'S WORK

— IN — THE

GARDEN.



O the beginner and the inexperienced, a calendar of operations each month serves as an excellent guide, and is often very serviceable to the old gardener in planning his crops, the double cropping of his ground, and arranging or directing his work. But, of course, all this will lead to error, unless regard is paid to difference in latitude. The operations, as directed, are intended for this latitude, which may, in general terms, be regarded as that of Chicago. With us Spring usually opens early in April, but it sometimes two weeks earlier. By Spring is meant when the buds swell, leaves start, and the forces of vegetation awake; and at this time hardy seeds should be planted, so that everywhere this may be accepted as the starting point of Spring operations corresponding to our first week in April, and other operations follow in corresponding succession. Generally one hundred miles difference in latitude make a difference of five days in earliness, so that points one hundred miles north of South Bend will be five days later, and at the same distance south it will be five days earlier.

In all garden operations it is desirable to do everything on time; no where is delay more unfortunate, especially in the tillage of crops, for nature rests neither night nor day, and weeds make astonishing progress if left or forgotten. To derive the most pleasure and profit from the garden, make it do its uttermost by heavy manuring, by abundant tillage, and the best of care. Get the best and grow it well.

JANUARY.—In our climate, of course, little can be done in the garden this month, but it furnishes an excellent opportunity to prepare for the year's work. One of the pleasantest portions of this preparation is reading up gardening topics, getting information upon questions new or unfamiliar, and planning the garden, determining the amounts to be raised, the seeds needed, and ordering them in season. No one who has long cared for a garden needs any admonition to look to it that he has good seeds. Nothing in the whole range of the year's work is more important; for, if the seed be poor or impure, or of a degenerate stock, the expenditures for labor and manures are all lost. Not only buy of a firm whose integrity you do not doubt, but also whose knowledge of the business is beyond question.

During this month the MARKET GARDENER is busy procuring manure for the year's crops, and a portion of it—fresh horse manure—is piled to induce heat and prepare for hot beds early in February. The sale of vegetables stored and yet unsold, will be pushed this month and next. In the extreme south, at New Orleans and corresponding latitudes, hardy seeds may now be planted, with but small risk from loss.

FEBRUARY.—The work suggested for last month, if undone can now be attended to. The best gardeners will have good tools, light steel hoes, always bright and clean, spading forks for four-fifths of the digging, in place of the spade—which is rarely needed except for ditching—light steel rakes, and a reel and a line, which are always needed for straight rows. If these things need mending or procuring, do it now. No owner of a garden should be without a hot-bed, and now is the time to make the frame, procure sash, make shutters, or mats to protect it nights, and to make a bed and sow the earliest seeds, especially, Radish, Lettuce, and Cress or Peppergrass.

During the month every cellar should be examined, to see if some vegetables are not decaying and undermining the health of the family. If vegetables must be stored in cellars, they should be closely watched, and in February may seem to attain their full ripeness, and decay begins.

MARKET GARDENERS will have started hot-beds early in the month, and will have sown Cabbage, Lettuce and Cauliflower seed for early plants to be hardened thoroughly, and of large size, when the ground will permit their transplanting into the garden in April. In sections where plants are wintered in cold frames, this is a wise precaution, in case (as often happens) mice or frost destroy the fall-sown plants. Cold frames need constant attention this month. Radish or Lettuce sown in hot-house or green-house at this time comes into market at the season such products are in most active demand and bring good prices. Abundance of manure must be provided for the increase in the number of beds next month.

In the south, early in this month, Spring will have arrived at Memphis and corresponding latitudes, and the operations recommended for April in this latitude will make it a busy month. For points further south, tender vegetables should not be sown till peach blossoms appear. Generally hardy vegetables should be sown at the earliest possible moment to make as much growth as possible before hot, dry weather.

MARCH.—Some seasons the frost leaves the ground early in this month, in which case a few of the hardiest vegetables can be sown as soon as the ground is dry enough to work. Peas are little injured even if the ground is again closed by frost, but the wrinkled sorts rot more easily and should not be sown until later. Onions, both sets and seed, will be safe, and Cabbage, Lettuce, Radishes and Beets will usually come through safely. These should be sown upon some dry, warm portion of the garden, open to the sun and protected from the wind. If a hard freeze threatens after they are up, straw can be scattered over them thinly, and removed after danger is past.

Every owner of a garden, to derive the most pleasure and profit from it, should have a hot-bed, even though a small one. It should be started early in this month. Cabbage, Tomato and Pepper seed should be sown to produce plants for an early crop in the garden, and Radish, Lettuce and Cress should be sown for early table use. If space is sufficient, or if a second bed be made, the earliness of several vegetables may be increased by its use. Upon small squares of inverted sod, Cucumber, Melon and Squash seed may be planted, and in May, when danger of frost is past, they can be planted out in the garden, without disturbing the roots, and will be materially earlier than open ground plantings, and what is quite as important they will escape the striped bug. Lima Beans may also be started upon such pieces of sod.

About this time many who desire to renovate their grass plots, and others who propose to create them afresh, may be interested to learn that I prepare a mixture of Grass Seed specially adapted to the purpose. The quantity of seed required for any given space, and the cost, is given in "Directions for Forming New Lawns."

THE MARKET GARDENER will prick out, an inch apart each way in boxes, the Tomato plants started late in February. Cabbage plants which are nearly large enough to set in the open ground should be exposed with caution and hardened ready for use. The Asparagus bed should be worked with the cultivator as soon as possible to induce an early growth, and the Rhubarb should receive an abundance of manure, worked with a fork or Plow. Early Potatoes to be planted in April should now be cut to two eyes, and put away to heal.

Parsnips and Horseradish will continue to find ready sale. Ruta Bagas, Carrots and Cabbage usually sell well at this season.

In the south early plants already need weeding, and later sowings must be made to keep up a supply for table of Peas, Lettuce, Radish, Cress and Turnips.

APRIL.—Though occasionally the buds start in March, it is more generally well into April before Spring opens, and directions given for the former month must be observed in this. To have a good garden it is not enough to be early about your work, but your ground must be made rich, and must be thoroughly and frequently tilled. Do n't be afraid of loss from too much manure and too much tillage. They will not only increase the quality and quantity of your crops, but also the earliness.

Plant early, although there may be risks. If you wait till all the danger is past, your enterprising neighbor will certainly get ahead of you. If plantings of some of the hardiest sorts were made last month, repeat them for a succession, and for a certain crop should the others fail. Sow Parsnips and Salsify at once, as they need the whole season. Early Potatoes, planted at least two or three inches deep, are now safe. All the hardy vegetables—Beets, Cabbage, Cauliflower, Cress, Carrot, Celery, Lettuce, Onion, Parsnip, Radish, Spinach and Turnip—which have not yet been sown, should at once receive attention. Sweet Corn, Dwarf Beans, Early Cucumber and Early Bush Squash should be **RISKED** in small amounts late in the month. Notice, I say **RISKED**, and should none or but few seeds grow, don't blame the seedsman, but at once plant again and note the result.

THE MARKET GARDENER, whose income depends so much upon the earliness of his crops, will generally risk a considerable, and having a soil and location adapted to earliness, and an abundance of hot-beds, his Spring's work will much of it be crowded into this month. Radishes and Lettuce from the hot-beds now find ready sale, and also Rhubarb and Asparagus, and Shallots and other hardy fall-set Onions begin to produce an income this month. Early Cabbage and Cauliflower should be transplanted into the open garden early in the month.

In the south the garden is so far along the chief care is to till the crops already growing, and to repeat sowings for a succession. Early in the month sow seed of late varieties of Cabbage for the main crop.

MAY.—In this month are made the principal plantings of the tender vegetables, in which we include Corn, Beans, Cucumber, Melon, Tomatoes, Squash and Peppers. Lima Beans should not be planted till late in the month. The Cucumbers, etc., on pieces of sod in the hot-bed, may now be set in the open garden. Seed for the late crop of Cabbage should be sown on several different days (to be sure of a stand), between the 5th and 15th of this month. Beets for winter use, and Carrots, Sugar Beets and Mangel Wurtzels for Stock may be sown any time this month. Before any weeds appear, stir the ground. Watch for Cucumber-bugs and Cabbage-flies. Transplant Tomatoes into the open air by the middle of the month.

THE MARKET GARDENER will find himself driven with work as the first warm days bring on the weeds. By the middle of the month Radishes begin to be large enough to sell, and should be placed upon the market at once, as the greatest demand for them is always during the first few days after their first appearance. If the Asparagus bed is strong and well established, it should be cut clean till Peas appear. As the price declines, many growers cease to cut their beds, when the price, in consequence, again advances, and he who has kept down all growth reaps the benefit. Lettuce, in bunch and in head, also sells freely this month. The same plantings recommended for the private garden should also be made by the marketman.

In the south, later sowings, of both hardy and tender vegetables, should be made to keep up a succession and a constant supply throughout the long summer. In a climate where they attain such perfection, none should fail to have an abundant supply of that delectable Bean—the Lima.

JUNE.—Nearly all the seeds for the year's supply of vegetables have now been planted, and many of the crops are well advanced. One of the pleasantest returns afforded in this month more than in any other is the contemplation of the thrift and promise of the garden. All nature is now at her best, and if the garden has been properly planted and industriously tended it cannot fail, especially during this month, to please its owner.

The principal work will be the war with the weeds and the bugs. Any vacancies should at once be re-planted. Plant Cucumbers for pickles, and Sweet Corn for late use, and if more Potatoes are wanted, the early sorts will mature if planted now.

THE MARKET GARDENER will find this the busiest month for sales of all the year. By the first of the month green Peas are ready, and are quickly followed by Beets, early Cabbage and Potatoes, and since all are in such large demand, the handling is no small task. Prick out Celery plants, and transplant late Cabbage into the field on very rich, strong ground. Ruta Bagas should be sown about the 20th, and if possible, just before a rain.

In the south, but few seeds sown in the heat of the season will repay the labor, and the principal work is to tend the crops maturing.

JULY Is not a month of hard work. Scattering weeds must be removed, and none allowed to go to seed upon land cleared of other crops. Flat Turnips may be sown in the latter half of the month, and Celery put in very rich soil. Some of the quick-growing sorts of Cabbage, like Winningstadt and Improved Brunswick, may still be set out.

THE MARKET GARDENER will have used every means to make his Tomato crop early, and will now reap his reward in the high price it brings. Sweet Corn, in the high price the first pickings bring, will prove the wisdom of risking a planting in April. If drought befalls, the cultivators and hoes should be kept in constant use. Hoe Cabbage when the dew is on, but Beans and Celery when it is off.

In the south, gardening in this month is at a stand-still.

AUGUST.—Little seed is committed to the ground during this month, except Flat Turnips, which may be sown on rich garden soil as late as the 20th, though the old rule is to "sow your Turnips the 25th of July, wet or dry, a thimble-full, to the rod." Hoe Cabbage very frequently and hill them up. Begin to earth up Celery, adding a little in height at each hoeing, to keep the stocks upright. Gather early Onions. The Cucumbers for pickles should be kept picked clean, as they cease bearing as soon as they are left to go to seed.

In the MARKET GARDEN, with Sweet Corn, Tomatoes, Melons and Pickle Cucumbers to handle, there is plenty of work. Onions should be pulled as soon as the tops are dry, left on the ground, thinly spread, until thoroughly dried, then thrown into piles to sweat several days, when they should be opened and dried again. On a warm, dry afternoon, when the husks rustle, they should be hauled on the barn floor, or other suitable place.

In the south, where rains have fallen, vegetables for Fall use may be sown with reasonable certainty of maturing.

SEPTEMBER.—Most crops in the garden are about matured and are now ripening. But Turnips, Ruta Bagas, Cabbage and Celery will this month make their principal growth, and demand frequent hoeing; the final banking of Celery to be given about October 1st to the main crop, so that it will be well bleached and ready for storage early in November. Hardy Lettuce sown early in the month, in a sheltered well-drained locality, and in Winter protected with straw, will in Spring show a fair proportion of live plants, which will be far ahead of the Spring-sown crop. Prickly-seeded Spinach, under similar treatment, usually does nicely. Hubbard, and other winter Squashes should be stored before frost. Beets are so exposed to the action of frost that they should be gathered before other roots.

THE MARKET GARDENER will find that late in the month, just before the frosts usually threaten, a great many realize their need of a supply of Tomatoes for canning, Corn for drying, Cucumbers for pickles, etc., and it will be wise for him to make plantings to provide for this demand, which usually pays good prices. During September, also, Potatoes usually bring a higher price than in August or October, the early crop being exhausted and the late one not yet in. Sales of Hubbard Squashes, Onions and Cabbage should be urged during the latter part of the month, both to secure customers and to get fall work well along. Early in the month sowings should be made of Cabbage, Cauliflower and Lettuce to be wintered in cold-frames.

In the south, the garden in this month is again growing in importance, and most of the hardy seeds should be sown, including late Cabbage.

OCTOBER.—The sowing and tillage of the season are now past, and the gardener must secure all the crops not yet harvested. Roots, if stored in the cellar, should be covered with dirt to keep them fresh and avoid wilting. Parsnips will winter in the ground, but it is unpleasant digging them in the Spring, and they had better be stored in the sand. Peachblow and other late growing varieties of Potatoes, should be left in the ground to ripen as long as it is safe.

THE MARKET GARDENER will generally find it most profitable to sell his crops in Autumn, if buyers can be found. Vegetable are peculiarly liable to decay, loss and shrinkage, in the changes of our uncertain winters. Moreover the labor of handling and securely storing such bulky commodities is considerable. Old gardeners are generally agreed that, as a rule, it is not profitable to store. Pit storage keeps them freshest, but demands abundance of covering after the Winter has fairly begun. Hubbard Squashes demand warm, dry storage.

In the South, Onion sets, for spring bulbs, should be put out, and hardy seeds like Lettuce, Spinach, Radish and Peas, should be again sown for succession. Earth up Celery, and by frequent hoeing keep the garden in thrifty growth during the growing season.

NOVEMBER.—If any crops are still ungathered, at once secure them. Generally Celery and Parsnips are the only ones safe to leave out so long, and the former is not regarded safe unless banked well up, so as to get the most benefit from the action of the frost. Asparagus tops should be cut off and the bed dressed with abundance of fine manure, to be dug in next Spring.

THE MARKET GARDENER, if he has been long in the business, has learned to get everything well out of the way by the beginning of this month, as Winter is liable to set in at any time, though generally the ground closes during the last half of the month. Soil for hot-beds should be got ready, sifted and put in covered bins, so that it shall have only its natural moisture when wanted for use. Land designed for Onions, Beets, Radish, and the earliest vegetables, should be manured heavily and plowed ready for the earliest use in Spring.

In the South, little more seed can be sown till January, unless in locations where protection can easily be given. Still he who loves fresh vegetables the year round, will risk a few Peas, Radishes and Lettuce, and, if they escape injury, enjoy them the more for the risk he ran.

DECEMBER.—In this month nothing can be done in the garden, but the MARKET GARDENER, in particular, will find it an excellent time to study up his business and make new plans. The mistakes of the past year should be reviewed, and such provisions made that they shall not be repeated. A plat of the garden, with the crops to be grown on each, the manure to be used, etc., takes but little work to prepare, and is of great value in the hurry of Spring.

In the South, this is THE month of Winter, and, together with midsummer, is the season of rest in the garden.

FLOWERS.

I do not offer so large a list as many seedsmen, believing it is not an advantage to the amateur florist to experiment with all the new varieties and "novelties" which come with a high-sounding name, because many things which do well when handled by a professional florist, prove worthless for an ordinary garden culture. There are but few private gardens in the country that cannot be made to give more pleasure with a reasonable number of varieties, than if the attempt were made to grow everything.

HARDY ANNUALS.

The seeds should be sown in a carefully prepared surface, from which large stones or clods have been removed, but it should not be so fine that rain will make it pasty. Sow thinly; cover with a thin coat of fine, dry earth—the smallest seeds need but a mere dusting to cover them—and, from the first, keep the plants thinned sufficiently to prevent over-crowding, which weakens them, and tends to a poor instead of a beautiful bloom. The soil into which they are transplanted for blooming should be deeply dug and well broken up; and if at all poor should be liberally manured. Spring-sown annuals are worthy of a better soil than they usually have allotted to them, as well as more careful treatment. It is not well to sow earlier than May, nor later than the middle of June. The most important part in the after-culture is to keep the clumps well thinned, for not only will the bloom of crowded plants be comparatively poor and brief, but by early and bold practice in thinning, the plants will become so robust and cover such large spaces of ground with their ample leafage and well-developed flowers, as really to astonish people who think they know all about annuals.

HALF-HARDY ANNUALS.

Give these as long a period of growth as possible to insure a vigorous plant before the season of flowering. (We have had a fine bed of Stocks by sowing in pans in March, and planting them out in a very small state; in fact, nothing could surpass them for beauty and fragrance; the only important exception to the rule of early sowing is the Aster.) It is bad practice to sow Asters till early in April; otherwise early sowing is a good rule. The soil for the seed-pans should be rich and fine. Good loam, improved by the addition of thoroughly decayed manure and leaf-mould,

with sufficient sand to render the texture porous, will suit all annuals that are sown in pans under glass. Sow the seed thin, cover very slightly, and lay squares of glass over to keep a uniform degree of moisture without the necessity of watering. Should watering become necessary, take care to avoid washing the seeds out. If the pans or pots containing the seeds are stood for an hour or two in a vessel containing two or three inches depth of water, they will absorb sufficient and there will be no occasion to pour water on the surface. A gentle heat is to be preferred, as a too rapid germination of the seeds tends to the production of weak plants. As soon as the young plants appear, remove the glasses and place the seed-pans in the fullest light, where air can be given without danger to them. A dry, east wind, blowing fiercely over them will prove a blast of death. If they have no air at all, they will be puny, rickety things, scarce worth planting out. Choice varieties should be carefully pricked out into pans and pots as soon as large enough; this will promote a fine, stocky growth and a fine development of flowers. Take care not to plant out until the weather is favorable, for any great check will undo all your work. If you cannot command heat for all half-hardy annuals, sow in the first week in April, and shut up the pans in a frame facing the south, and the seeds will grow and do well. If that is too much trouble, sow in the open border early in May, making the border rich and friable, that they may have a good chance from the first.

GREEN-HOUSE ANNUALS.

These require the same general treatment as advised in the last section. But it is advisable to sow earlier, and in a stronger heat than is required for annuals that are to be planted out. It is also necessary to be in good time pricking out the new plants, for if they get much drawn they cannot make good pot plants. A light, rich, perfectly sweet soil, containing a fair proportion of sharp sand, will insure plants worth having. It is also important to get them into separate small pots as soon as possible, and to shift them on to larger and larger pots until they have sufficient pot-room for flowering, after which shift no more. As soon as these pots are filled with roots, give very weak manure-water constantly until the plants are in flower, and then discontinue it, watering with pure, soft water only.

BIENNIALS AND PERENNIALS.

Biennials are those plants which do not usually flower the first year, and are only in perfection one season. Perennials continue to flower several years in succession. The seed may be sown at any time from May to August. Some varieties may be sown in September, or as soon as ripe, and if the plants get strong before the setting in of Winter, will flower the next summer. Many of them may be raised in the open ground, like hardy annuals, and transplanted, but choice kinds should be sown as directed for half-hardy and tender annuals in pots or seed-pans. Several of them on account of their slow tendency to vegetate, are more difficult to raise than annuals, and the remarks respecting watering and shading will apply particularly to them. As they do not blossom the first year, they may be thinned out or removed from the seed beds as soon as they are well rooted, and planted in different parts of the garden or into a nursery bed, in rows, a foot or more apart; keep them clear of weeds by hoeing and stirring the earth occasionally, which will greatly promote their growth and prepare them for transplanting into the permanent blossom beds, either in the Autumn or the following Spring. Biennials are raised principally from seed sown every year. In transplanting take care to preserve some earth to their roots, and tie the tall-growing kinds to neat poles or rods. Remove decayed plants and replace them with vigorous plants from the nursery bed. Keep all the beds free from weeds, and the walks clean and neat.

Flowers for Special Purposes.

For constant brilliancy the Aster, Delphinium, Balsam, Scabiosa, Salpiglossis, Stock, Antirrhinum, Dianthus, Pansy, Petunia, Phlox Drummondii, Portulaca and Double Zinnia, should have a place in all collections. Many others will be found in the Catalogue which we cannot mention.

FOR MASSES OF COLOR.—The effect is often strikingly beautiful, where entire beds are grown of the same color. The following plants are some of the most desirable for such purposes:

RED AND ITS VARIOUS SHADES.—Zinnia, Phlox, Petunia, Stock, Silene, Linum, Dianthus, Sweet Pea, *Cacalia*, etc.

WHITE.—Clarkia, Phlox, Sweet Alyssum, Candytuft, Sweet Pea, Portulaca, Stock, etc.

BLUE.—Whitlavia, *Nigelia*, *Myosotis*, Larkspur, *Ageratum Mexicanum*, Campanula, Gillia, etc.

YELLOW.—Dwarf *Tropæolum*, *Eschscholtzia*, Marigold, *Calliopsis*, *Bartonia Aurea*, etc.

FLOWERS FOR FRAGRANCE.—For richness of perfume, Stocks, Sweet Alyssum, Mignonette and Sweet Pea take the lead.

FROST-HARDY PLANTS.—Our annual frosts are seldom welcome to such as find a chief pleasure in the little world of beauty to be found in a tasteful flower garden. But there are a few, and some of them not the least desirable, which hold old Boreas at bay, even as late as the middle of November. Among these are Japan Pinks, *Bartonia Aurea*, Dwarf Chrysanthemum, Flowering Aster, Sweet-scented White Candytuft, Antirrhinum, Centranthus, Delphinium Formosum, Double Daisy, Malope, Gillias, Mignonette, Phlox Drummondii, Scabiosa, Lupins, Stocks, Verbenas, Sweet Peas, Petunias.

FLOWERS FOR BASKETS.—Sweet Alyssum, Mignonette, Mimulus, *Tropæolum*, *Nemophila* and others.

CLIMBING PLANTS.—Among the best are *Dolichos*, *Convolvulus*, Ipomea, Gourds and Cucumbers (ornamental), Sweet Peas, *Calampelis Scabra*, *Cobæa Scandens*, etc.

ORNAMENTAL-LEAVED PLANTS have come to have a world-wide popularity. Among the best are *Ricinus* (the tallest from three to eight and ten feet) *Amfranthus*, *Canna*, and *Perilla Nankinensis*. The effect is best when grown in groups of several colors—say six or more. The tallest should be in the center.

PLANTS FOR SUMMER HEDGE.—There is nothing that will make a prettier low hedge for purposes of beauty, or screen, than the Sweet Pea, when supported by low brush, early and properly set. The seed should be sown at a depth of not less than four inches, early in the Spring, and the earth should be kept well hoed up to the stalk through the season. This will insure, in a rich soil, an exuberance of flowers, and a beautiful hedge of three or four feet in height. The *Amaranthus* also makes a fine hedge of rich, dark foliage, some varieties furnishing two and even three colors. The Double Zinnia is also desirable. Most of the tall-growing plants are suitable.



FLOWER SEEDS.

ALL FLOWER SEEDS SENT FREE BY MAIL ON RECEIPT OF PRICE.

All packages of Flower Seeds in this list are five cents each except where otherwise noted, and may be ordered by the number, thus avoiding the writing of the name in full.

- 1 Abronia Umbellata.—A Verbena-like annual.
- 2 Acroclinium Roseum } Favorite everlasting flower for winter bouquets.
- 3 " Album }
- 4 Adonis Aestivalis, Flos Adonis.—Should be planted in a shady location.
- 5 Ageratum Mexicanum } Splendid plants for massing, very useful for bouquets.
- 6 " Album }
- 7 Alyssum, Sweet.—Very sweet; suitable for beds or edgings.
- 8 " Saxatile.—Compacta showy yellow.
- 9 Amaranthus Cruentus, Prince's Feather.
- 10 " Caudatus, Love-lies-bleeding.
- 11 " Tricolor, Joseph's Coat.
- 12 " Melancholicus Ruber.—Foliage blood red.
- 13 " Salicifolius.—Fountain plant, etc., 10c.
- 14 Antirrhinum, (Tall varieties mixed) } Snap Dragon.
- 15 " (Dwarf varieties mixed) }
- 16 Aquilegia, Fine mixed.—Highly ornamental plants.
- 17 Aster.—Fine mixed double.
- 18 " Mixed German, 10c. }
- 19 " Peony Flower-d 15c. } Well known favorite annuals.
- 20 " Chrysanthemum, Dwarf, 15c. }
- 21 " White, 15c. }
- 22 " Blood Red, 15c. }
- 23 " Rose Flowered, 15c. }
- 24 Auricula, Extra quality.—A grand perennial plant, 25c.
- 25 Balsam, Fine Double Mixed.—Good double varieties, mixed colors.
- 26 " Camelia Flowered, Extra Double, 15c.
- 27 " Rose Flowered, Extra Double, 15c.
- 28 " Solferino, 15c.
- 29 " Double Pure White, for Florists, 15c.
- 30 " " Scarlet, 10c.
- 31 " " Purple, 0c.
- 32 " " Bright Pink, 10c.
- 33 " " Scarlet Spotted 10c.
- 34 Balsam Apple, Trailing plants, with ornamental foliage and remarkable fruit.
- 35 Balloon Vine.—Handsome trailing plant.
- 36 Bartonia Aurea.—A free flowering showy plant.
- 37 Bellis Perennis.—Double Daisy, 1 c.
- 38 Browallia, Fine Mixed.—Profuse blooming Summer and Autumn plant.
- 39 Cacalia Cocinea, Tasel Flower.—Showy for mixed borders and fine for bouquets.
- 40 Calandrina, Fine Mixed.—Especially adapted to sunny situations.
- 41 Calliopsis, Fine mixed } Colors rich and striking; flowers numerous and beautiful.
- 42 " Coronata }
- 43 Canna, Fine Mixed.—Remarkably handsome foliage plants.
- 44 Candytuft, White }
- 45 " Dark Purple } Favorite showy annuals, for beds or edgings.
- 46 " Crimson }
- 47 " Fine Mixed }
- 48 Canterbury Bells, Fine mixed.—Old and popular garden favorites.
- 49 Canary Bird Flower.

- 50 Carnation.—Finest English, 15c.
 51 Catch Fly—Red and White.
 52 Celosia Aurea Pyramidalis, Magnificent feathery flowering plants.
 53 Centaurea Cyanus, Bachelor's Button } Very showy, free flowering border plants.
 54 " Moschata, Sweet Sultan }
 55 Centranthus, Fine mixed.—Effective in beds or edgings.
 56 Clarkia Elegans, Single Mixed } Favorite plants, growing under almost any cir-
 57 " Double Mixed } cumstances.
 58 Clianthus Dampierii, 25c.
 59 Cobea Scandens.—A fine climbing plant. In sowing place the seeds edgewise, 10c.
 60 Collinsia, Mixed.—Exceedingly pretty, free flowering annual.
 61 Convolvulus Minor, Mixed
 62 " Major, White Morning Glory }
 63 " " Red " " } An old favorite handsome climber.
 64 " " Blue " " }
 65 " " Mixed " " }
 66 Coxcomb, Dwarf mixed }
 67 " Japanese mixed }
 68 Cypress Vine, Scarlet } Pre-eminent for delicate foliage and graceful flowers :
 69 " " White } finely adapted for trellises.
 70 " " Mixed }
 71 Delphinium Elatum, Bee Larkspur. } Very showy plants, producing spikes of richly
 72 " Formosum, } colored flowers.
 73 Dianthus Chinensis, China Pink }
 74 " Imperialis, Imperial Pink } No garden is complete without a large
 75 " Heddewigii, Japan Pink } amount of these beautiful flowers,
 76 " Laciniatus } which bloom from seed the first sea-
 77 " Diadematus, Finest Double 15c. } son, if started early.
 78 " Laciniatus, Finest Double 10c }
 79 Digitalis, Fine mixed Fox Glove.
 80 Dolichos Lablab, Hyacinth Bean.—A useful climber.
 81 Erysimum, Arkansanum.—Showy for large beds or mixed borders.
 82 Escholtzia, California Poppy.—Very fine flowering plants.
 83 Evening Primrose.
 84 Forget-me-not.—(Myosotis Palustris.)
 85 Gaillardia Picta.—Splendid bedding plants.
 86 Globe Amaranth.—Favorite everlasting flowers.
 87 Godetia, Mixed.—Deserving of extensive culture
 88 Gourd, Hercules' Club.—Large, long, club-shaped.
 89 " Egg shaped.—size and shape of Swan's egg.
 90 " Orange.—Mock Orange.
 91 " Calabash or Dipper.—The old fashioned dipper gourd.
 92 " Sugar Trough.—Often used for buckets.
 93 Helichrysum, Monstrosium Double, Fine Mixed.—Everlasting flowers.
 94 Heliotrope.—Finest mixed.—Deliciously fragrant plants, fine for bedding or pot ; 10c.
 95 Hollyhock, Double mixed.
 96 Ice plant.—Suitable for hanging-baskets or rock-work.
 97 Ipomea Cocinea, Star Ipomea } Pre-eminent for delicate foliage and graceful flowers
 98 " Elegantissima, 10c }
 99 Jacobea, Fine mixed—especially valuable for bedding purposes.
 100 Larkspur, Dwarf rocket.—An old favorite.
 101 Lathyrus, Everlasting Pea.—Useful for covering arbors, trellises, etc.
 102 Linum Grandiflorum.—Scarlet Flax.
 103 Loasa.—A tender ornamental climbing plant.
 104 Lobelia Erius.—Well adapted for edging, pots or rockeries.
 105 " Gracilis.
 106 " Fine mixed.
 107 Lupinus, Fine mixed.—Useful for shrubby plants.
 108 Malope Grandiflora.—Showy, free-flowering border plants.
 109 Marigold, Double French }
 110 " Africa } Profuse blooming variety of plants ; very double
 111 Marvel of Peru, Four O'clock.—Free-flowering, old-fashioned favorite.
 112 Mignonette, Sweet scented.—indispensable in every garden.
 113 " Large flowered Pyramidal.—Quite distinct from the old variety.
 114 " Parson's White.—A desirable variety, 10c.
 115 Mimosa Pudica (Sensitive Plant)—Grown as a curiosity.
 116 Mimulus Hybridus, Finest mixed, 15c.
 117 " Moschatus, Musk Plant, 10c.
 118 Nasturtium, Dwarf Crimson }
 119 " " Orange } A most valuable class of plants ; as indispensable as
 120 " " Spotted } Geraniums for summer decorations.
 121 " " Scarlet }
 122 " " Mixed }
 123 Nemesia, Fine mixed.—Interesting, profuse-flowering little annual.
 124 Nemophila, Fine mixed.—A popular early-flowering plant.
 125 Nigella, (Love-in-a-Mist)—Compact, pretty flower, with curious seed-pods.

126	Pansy	Fine Mixed	5c	A well known and universal favorite, producing a profusion of brilliant flowers; too well known to need description. Picking off the buds as soon as they appear during the summer months will cause the plants to grow bushy and compact; they will bloom profusely during the late autumn and early spring months. Prefers a moist, shady situation; cover during the winter months. Seeds sown in August or September, kept in a cold frame through the winter, and planted out in the spring, will blossom the whole season.
127	"	King of the Blacks,	15c	
128	"	Sky Blue,	15c	
129	"	Black Blue,	15c	
130	"	Violet Bordered White,	15c	
131	"	Yellow,	15c	
132	"	White,	15c	
133	"	Gold Margined,	15c	
134	"	Odier,	15c	
135	"	Emperor William,	20c	
136	"	Mahogany Colored,	10c	
137	"	Bronze,	10c	
138	"	Finest English Mixed,	15c	
139	"	Finest German mixed,	15c	
140	"	Fancy or Belgian,	very ex 25	
141	Peas,	Sweet, Mixed		
142	"	"	Painted Lady	
143	"	"	Scarlet	
144	"	"	Black	
145	"	"	White	
146	Penstemon.	—Remarkable for its long graceful spikes of richly colored flowers. 10c.		
147	Petunia,	Countess of Ellesmere		
148	"	Blotched and striped	Very valuable favorites.	
149	"	Fine mixed		
150	Phlox Drummondii,	White	One of the most beautiful annuals, remaining in bloom the entire season, and of the easiest possible culture.	
151	"	Scarlet		
152	"	Dark Red		
153	"	Fine Mixed		
154	"	Grandiflora, Finest Mixed,		10c.
155	Pink, Picotee	Fine English.—Useful border perennial, 10c.		
156	Poppy	Carnation.		
157	"	Peony Flowered.		
158	Portulacca,	Fine Mixed.	—Unrivalled for edgings and beds.	
159	Primula Fimbriata,	Red,	50c	
160	"	"	White, 50c	
161	"	Elatior, or Polyanthus,	15c	
162	Ricinus.—Giganteus	Stately growing annuals with ornamental foliage.		
163	"		Mixed	
164	Salpiglossis,	Fine Mixed.	—Highly ornamental autumn flowering annuals.	
165	Salvia Coccinea,	Splendens, Vivid Scarlet,	10c	
166	"	Patens, Deep Blue,	25c	
167	Sanvitalia Procumbens.	—Valuable bedding plants.		
168	Scabiosa,	Tall Mixed	Showy plants for mixed borders, and fine for bouquets.	
169	"	Dwarf Mixed		
170	Silene Pendula.	—Bright-colored annual; very showy and effective.		
171	Stocks.—Dwarf German 10 weeks,	White	One of the most popular and beautiful flowers.	
172	"	"		Crimson
173	"	"		Yellow
174	"	"		Mixed
175	Sweet William,	mixed	Popular favorites, producing large heads of richest and most beautiful flowers.	
176	"	Hunt's Perfection		
177	"	Double,		10c
178	Thunbergia,	Fine Mixed.	—A genus of slender, rapid-growing climbers.	
179	Verbena,	Mixed	Well-known and universally admired plants; invaluable for summer decoration. Blooming freely the first year from seed.	
180	"	Choicest Hybrids,		20c
181	"	Pure White,		20c
182	"	Black Blue,		20c
183	Viola.—Sweet scented Violet,	10c.		
184	Xeranthemum,	Fine Mixed.	—Well-known everlastings; valuable for winter bouquets.	
185	Zea Japonica,	Striped Leaved.	—Very ornamental.	
186	Zinnia,	Fine Double Mixed	Valuable bedding annuals, remaining in bloom for a long time.	
187	"	"		Scarlet
188	"	"		Orange
189	"	"		White
190	"	"		Haageana, 20c

ORNAMENTAL GRASSES.

191	Agrostis Pulchella.	— Useful for both summer and winter bouquets.
192	Bromus Brizaeformis	—A beautiful variety, with drooping panicles.
193	Briza Maxima	—Large and most beautiful variety.
194	Briza Gracillis	—Small, very delicate and very graceful.
195	Chloris Truncata	—A curious sort.
196	Coix Lachryme (Job's Tears)	—A much admired graceful variety.
197	Hordeum Jubatum	—Lovely purplish plumes; very fine.
198	Lagurus Ovatus	—Small White plumes.
199	Stipa Pennata	—One of the finest.

NEW OR

Very Desirable Vegetables

FOR 1884.

For description of these varieties please see General List of Vegetable Seeds.

BEANS.

Ivory P. d Wax, Prolific Tree, Dwarf Horticultural.

BEET.

Eclipse, Bastian's Extra Early, Dewing's Improved, Egyptian.

CABBAGE.

True Early Jersey Wakefield, Very Early Etampes, Harman's No. 40, Fottler's Improved, Henderson's Early Summer, Excel-sior Large Flat Dutch.

CARROT.

Danvers.

CAULIFLOWER.

Early Favorite, Early Snowball, Erfurt Earliest Dwarf.

CELERY.

La Plume, Crawford's Half Dwarf, Golden Heart.

CORN—SWEET.

Extra Early Marblehead, Amber Cream, Egyptian.

CUCUMBER.

London Long Green.

LETTUCE.

Salamander, Yellow Seeded Butter, Hubbard's Market, Black Seeded Simpson.

MELON--MUSK.

Improved Canteloupe, Bay View, Hacken-sack, Improved Christiana.

MELON--WATER.

Dark Icing, True Georgia Rattlesnake.

MANGEL WURZEL.

Golden Tankard, Norbiton Giant Long Red.

ONION.

Extra Early Red, Yellow Globe Danvers.

PEAS.

Harman's First and Best, American Wonder, Telegraph.

PEPPER.

Golden Dawn, New Cranberry.

POTATO.

New Early Sunrise, Late Beauty of Hebron.

RADISH.

Earliest Market, Mammoth Purple Top.

SPINACH.

Long Standing.

SQUASH.

Perfect Gem, Essex Hybrid.

SUNFLOWER.

Mammoth Russian.

TOMATO.

Livingston's Favorite, Alpha, Essex Early Hybrid, Perfection.

TURNIP.

Extra Early Purple Top Munich, Harman's Genuine Golden Ball, Purple Top White Globe.

THE VEGETABLE GARDEN.

The amateur gardener, and the expert as well, should make out a list of the varieties of vegetables he desires to have, and then lay off on paper a diagram of his garden, assigning certain rows to each sort. He can then readily calculate by reference to the following table the amount of seed he will require:

Quantity of Each Kind of Vegetable Seed to Sow Upon 100 Yards of Single Row.

Asparagus.....8 ounces	Corn.....1 pint	Onion, Sets.....4 ounces
Beans, Bush.....2 $\frac{1}{4}$ quarts	Cress.....3 ounces	Parsley.....2 "
" Lima.....3 pints	Cucumber.....4 "	Peas.....2 quarts
" Pole.....1 pint	Egg Plant..... $\frac{1}{2}$ "	Pepper..... $\frac{1}{2}$ ounce
Beet.....3 ounces	Endive.....2 ounces	Pumpkin.....2 ounces
Broccoli..... $\frac{1}{2}$ ounce	Leek.....2 "	Radish.....6 "
Brussels Sprouts..... $\frac{1}{4}$ "	Lettuce.....2 "	Rhubarb.....5 "
Cabbage..... $\frac{1}{4}$ "	Melon, Water.....2 "	Salsify.....4 "
Carrot.....2 "	" Musk.....4 "	Spinach.....6 "
Cauliflower..... $\frac{1}{4}$ "	Mustard.....4 "	Squash.....3 "
Celery.....1 "	Okra.....2 "	Tomatoes.....1 "
Collards..... $\frac{1}{4}$ "	Onions.....2 oz. for large bulbs	Turnip.....3 "

Always provide yourself with a surplus quantity of the seeds you design to plant, to hold as a reserve for replantings, as dry weather, beating rains, and insect depredations often destroy the first sowings.

GENERAL LIST OF Vegetable Seeds.

When comparing prices my customers will please bear in mind the fact that I pay the postage on all seeds ordered by the package, ounce or $\frac{1}{4}$ pound.—See second page cover.

Prices on all Vegetable Seed for larger quantities than specified will be given on Application

ASPARAGUS.

Sow seed in the Spring as early as the ground will permit, in rows one foot apart. Soak seed twenty-four hours in warm water. Cover about $1\frac{1}{2}$ inches and press earth down by treading or rolling. Carefully hoe and keep free from weeds. When two years old transplant to permanent beds, no base being required. Plow or dig the ground 9 or 10 inches deep, set the plants 6 inches deep in rows 12 inches apart, and 15 inches between the rows. Top dress the bed with three inches of old, well-rotted pulverized manure. Every autumn stalks should be rolled down, and in spring, top dressed with old rotted manure, and sprinkle the bed well with salt. Never use a fork on the bed as it will injure the crown. Should not be cut till the plants are three years old, and then as near the surface as possible.

	Per pkt.	Per oz.	$\frac{1}{4}$ lb.
Conover's Colossal. The best, the largest and most vigorous.....	\$0 05	\$0 10	\$0 20
Asparagus Roots. See vegetable plants.			

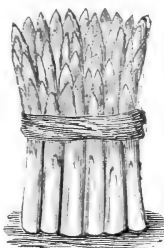
BEANS.—DWARF OR BUSH.

Plant about the middle of May, in a warm, dry spot, in drills an inch deep, and two feet apart, two inches apart in the drills, and cultivate when not wet. For succession plant about every two weeks.

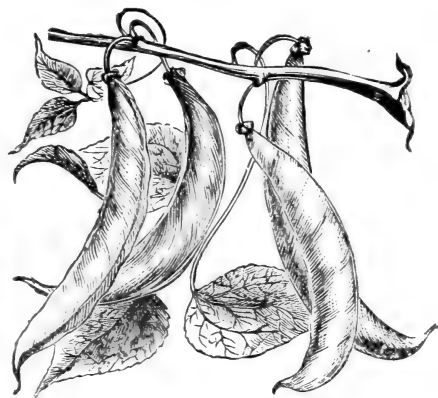
	pkt.	qt.
Ivory Pod Wax.—Vines are compact and bushy; strong growers and are without doubt the most prolific of any variety of our garden beans. The pods are fit for the table at least a week earlier than the Black Wax, are long and handsome, of a beautiful, transparent, waxy-white color, and entirely stringless until nearly ripe; ripe beans medium size, oval, white and of excellent flavor.	10c	40c
Dwarf Horticultural.—A bush or dwarf variety of the well known Horticultural Pole Bean, possessing all of the merits of that standard sort. They differ only in the one being a dwarf the other a pole bean.	10c	40c
Prolific Tree.—New; a very prolific white bean; very fine and highly profitable. Numerous branches; needs but one plant in a hill. The beans are nearly round, plump and very handsome; sure to sell well in market.	10c	40c
Early China Red-eye—Early and of good quality.....	10c	30c
Early Red Valentine—Productive and of excellent flavor.....	10c	30c
Early Yellow Six Weeks—Early and prolific.....	10c	30c
Early Mohawk—Productive and of good quality.....	10c	30c
Early Refugee, or <i>One Thousand to One</i> —Extensively grown for pickling.....	10c	30c
White Marrow—Early, productive, good for baking and boiling when dry.....	10c	30c
White Kidney, or Royal Dwarf—Excellent as a shell bean.....	10c	30c
German Wax—Tender, delicious and productive. No string.....	15c	40c
Golden Wax—Rich, tender, delicious, early. No string; one of the best.....	15c	40c
Navy—The standard for field culture. Bean of Commerce.....	15c	qt. \$1 00 pk.



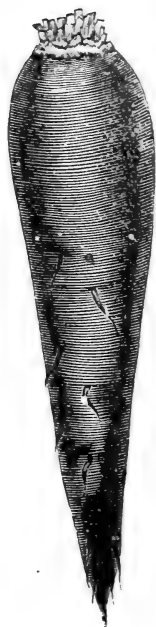
Bassano Beet.
See Page 14.



Asparagus.
See Page 12.



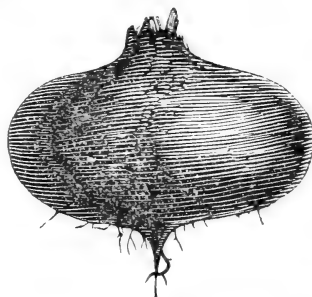
Ivory Pod Beans. See Page 12.



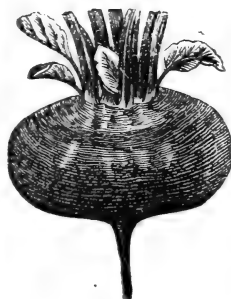
Long Blood
Beet.
See Page 14.



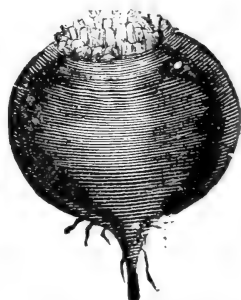
Crawford's Half
Dwarf Celery.
{See Page 18.



Blood Turnip Beet.
See Page 14.



Egyptian Beet.
See Page 14



Dewing's Improved
Beet. See Page 14.

BEANS.—POLE OR RUNNING.

Succeed best in a sandy loam, enriched with short manure in the hills, which make from three and a half to four feet apart, with five or six beans, planted eye downward in each hill, one inch deep. If warm and dry, plant about the 10th of May for an early crop; and for the general crop a little later.

	Per pkt.	qt.
Horticultural—A popular variety, good when green or shelled.....	15c	40c
Lim t—This is esteemed the best of all Pole Beans.....	20c	50c
Dutch Case knife—A very productive variety.....	20c	40c
Scarlet Runner—A great favorite in European gardens.....	20c	50c
German Wax, Indian Chief or Pole Butter. A capital snap; no string.....	20c	50c
Giant Wax. Rich, tender, delicious, pods long, waxy; red seed.....	20c	50c

BEET.

Sow in drills fourteen to sixteen inches apart, one inch deep, in light rich soil, sandy loam being preferable, well manured, with decomposed compost carefully worked in. For an early supply, sow as soon as the ground can be worked; about the middle of May for general crop. When the plants are three inches high thin out to about six inches apart. Take up and store after the first hard frost, either in trenches in the garden or in earth in the cellar.

	pkt.	oz.	¼lb.
Eclipse, New.—This variety promises to be a great acquisition to our list of Turnip Beets. It is <i>extra early</i> , very smooth and regular, and has a firm small top; <i>flesh fine, very sweet, and dark blood color</i> . It is very desirable for market gardeners on account of its extreme earliness as well as its numerous other good qualities.....	10c	15c	35c
Dawing's Improved.—Early, very delicate and tender; fine form, beautiful flesh, highly esteemed.....	5c	10c	25c
Egyptian.—The earliest, very fine for first crop.....	5c	10c	30c
Bastian's Early Blood Turnip.—As early as the Bassano, but of a much darker color; small top; handsome shape; one of the standards for early market.....	5c	10c	30c
Extra Early Bassano—Flesh white with pink circles. Very early.....	5c	10c	25c
Early Blood Turnip—Best for summer and winter. The standard.....	5c	10c	25c
Improved Long Blood—Good winter variety.....	5c	10c	25c
Swiss Chard. For Greens.....	5c	10c	25c

FOR STOCK.

Many experiments have shown that nothing is cheaper and better than Sugar Beets and Mangel Wurzels, for feeding stock. Cattle, like men, thrive upon a variety of food, and while hay alone will preserve the life of an animal during the winter, a judicious mixture of other articles of diet will produce better results. Roots alone will not secure health and rich milk, but with other things they are invaluable.

SUGAR BEETS AND MANGEL WURZELS.

A Reduction in Price made on Large Quantities.

	Pr oz.	¼lb.	lb.
White French Sugar. An improved variety, grows to a large size, very prolific, fine for stock, as it has a large percentage of sugar.....	10c	25c	60c
Long Red Mangel Wurzel. A large, long variety, grows well out of ground, color, light red.....	10c	25c	50c
Golden Tankard. One of the most nutritious varieties in cultivation; flesh deep yellow, tankard shape. A splendid cropper; valuable for farming.....	10c	25c	80c
Norbiton's Giant Long Red Mangel Wurzel. An excellent variety, growing well out of the ground with a small top, very large, of fine grain and an enormous yielder. This is probably the best long variety in cultivation.....	10c	25c	60c
Yellow Gloe Mangel Wurzel. Roots of large size and of globular form; productive and a good keeper.....	10c	25c	50c
Red Globe Mangel Wurzel. Globular in form; color, red.....	10c	25c	50c
Mammoth Mangel. A particularly fine stock of Mangel. The roots attain an enormous size, smooth and regular in shape.....	10c	25c	50c



True Early Jersey Wakefield Cabbage. See Page 16.



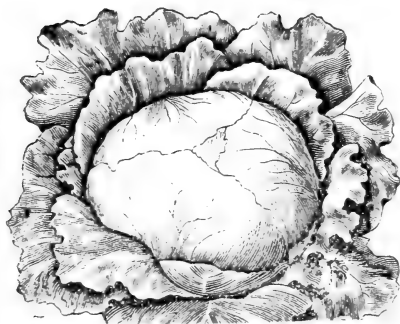
Henderson's Early Summer Cabbage. See Page 16.



Fottler's Improved Brunswick Cabbage. See Page 17.



Newark Early Flat Dutch Cabbage. See Page 16.



Excelsior Large Flat Dutch Cabbage. See Page 17.



Perfection Drumhead Savoy Cabbage. See Page 17.

BORECOLE or KALE.

To secure heavy crops of this hardy, useful Winter vegetable, a deep, rich soil is essential, and the ground should be trenched two feet deep and liberally manured. Sow about the middle of April, in well-prepared soil, covering the seeds thinly and evenly. Plant out in June, and cultivate as recommended for cabbage.

	Per pkt.	oz.	½lb.
Dwarf Curled or German Greens. Dwarf; leaves yellowish green, very finely fringed.....	5c	10c	25c
Tall Curled Scotch. It is very hardy, and, like the Savoy, is improved by a moderate frost.....	5c	10c	30c

BROCCOLI.

Culture—the same as for cauliflower, to which it is closely allied. It succeeds best in rather moist and cool atmosphere.

	Per pkt.	oz.
Early Purple Cape. Heads medium size, and of greenish purple.....	10c	50c
Carter's Summer. Very early and of delicate flavor.....	10c	50c
Early Large White. Heads compact and of creamy white color.....	10c	60c

BRUSSELS SPROUTS.

Sow in the same manner as cabbage, through May, and transplant in July. The stocks sometimes grow to the height of four feet, upon which are formed a large number of miniature cabbages, which are the edible parts; always tender, they become more so after a slight frost.

	Per pkt.	oz.
Improved Dwarf. A new variety of excellent quality..	10c	20c

CABBAGE.

Early varieties should be sown in hot-beds during February and March, transplanted into very richly manured ground about the middle of April. The ground should be loosened and worked up thoroughly to grow large and good heads. Hoe often to kill weeds, and draw earth up to the stems. For later crop sow in shallow drills (four to six inches apart) in April or May. To keep off the "fly," soot, wood ashes, lime and tobacco dust, or any or all, should be used freely, very early in the morning; one day's neglect may spoil the plants. When the plants are about six inches high, set, during the month of June, in rich ground, three feet apart. Club-foot is variously attributed to successive crops on the same ground, the use of manure full of insects—especially hog dung—and very dry weather.

I invite special attention of all who raise Cabbage to the following list and description of approved varieties which I offer. I have made this crop a study, and give the reader the result of many years' close observation.

	Per pkt.	oz.
"True" Early Jersey Wakefield.—There is no early variety that can compete with the "True" Early Jersey Wakefield; heads are of good size, larger than early sorts generally, conical, very solid; short stalk, leaves compact and sufficient to protect the head in carrying to market or shipping. The most reliable sort for fall sowing to winter over, not liable to run to seed in the spring. Excellent for first hot-beds.....	10c	40c
Very Early Etampes.—Introduced from France quite recently. Heads of good size, conical, firm, but not as solid at the point as the Wakefield, short stalk, but few outer leaves. May be close planted, which will adapt it for small, private gardens.....	10c	25c
Harman's Number 40.—Named and sent out by me last year; was originally grown by an extensive market gardener. Short stemmed, heads large, flat, and solid; leaves not curled. It has been carefully examined by parties experienced in Cabbage growing, and is by them considered a great acquisition. It is second early. In this section, when planted last of July or first of August, it is one of the very best late kinds. There are few if any of the other varieties that from the same number of plants, will produce so many well-formed, large, solid heads as this.....	15c	50c
"Newark" Early Flat Dutch.—One of the old favorites of the New Jersey market-gardeners. Heads medium to large, flat, short stalk, about two weeks later than the Wakefield. Decidedly the best second early sort.....	10c	35c
Henderson's Early Summer.—A strain of Early Flat Dutch, very similar to the preceding—in general characteristics same; hardly as uniform in shape. Popular as a second early sort. This and the preceding should be sown late if designed to winter the plants over, as they are liable to run to seed if the plants are large in the spring. Excellent and sure when sown in hot-		

	Per pkt.	oz.
beds or in open ground in the spring. Both sorts can be used for winter if sown about July 1st.	10c	30c
"Excelsior" Large Flat Dutch.—One of our old standard sorts. Heads very large, very flat, and very solid, short stalk, foliage smooth, light green, with a silvery gloss. This we consider one of the very best of the large flat varieties, suited for summer, fall or winter. Becoming very popular at the south.	10c	30c
Fottler's Improved Brunswick.—Heads large, solid, and very flat, short stalk, foliage smooth, glossy green; follows the Early Flat Dutch; fine for summer, fall or winter. I have a superior strain of this popular variety.	10c	30c
"Bristol" Late Flat Dutch.—A variety very popular along the Hudson river, especially with the market-gardeners of Albany and vicinity. Heads moderately large, roundish flat, solid, leaves compact; may be planted close. Excellent for fall or winter.	10c	30c
Premium Flat Dutch.—An old standard sort. Heads large and solid, flat, sometimes rounded.	5c	25c
Large Late Drumhead.—Extra selected. A standard variety for fall and winter	5c	25c
"Perfection" Drumhead Savoy.—Very tender, excellent for winter.	5c	25c
Winningstadt (cone-shaped).—A well known second early, very fine.	5c	25c
Early French Oxheart.—A favorite market variety.	5c	20c
Early York.—A well known, favorite variety.	5c	20c
Large York.—Larger and later than the preceding.	5c	20c
Fine Red Pickling.—Used almost exclusively for pickling.	5c	25c
Stone Masou.—An improved variety of the Mason Drumhead.	5c	30c
Marblehead Mammoth.—The largest of all cabbages.	5c	30c

CARROT.

Sow as early in the spring as the ground can be worked, in a rich, light soil, well manured with old, fine manure, and thoroughly worked very deep. Land that was heavily manured the previous season is the best. Plant in rows fourteen inches apart in the garden, but from twenty to twenty-two inches in the field, and thin plants to five or six inches in the rows, hoeing often between them, but very lightly, just enough to kill the weeds, otherwise the roots tend to branch or fork. For general crop sow during May.

	Per pkt.	oz.	¼lb
Danvers (new). In form midway between Long Orange and Short Horn, color dark orange, smooth and handsome.	5c	15c	50c
French Forcing.—The earliest variety; valuable for forcing.	5c	15c	50c
Early Scarlet Horn.—An old, favorite sort, much esteemed for early summer use.	5c	15c	50c
Improved Long Orange.—An improved variety of Long Orange.	5c	15c	35c
Long Red Altringham.—Large and fine-flavored; an excellent sort.	5c	10c	30c
Long White Belgian.—A very productive kind, grown only for stock.	5c	10c	25c

CAULIFLOWER.

Should be sown in hot beds in February, transplanted into another frame in the latter part of March, and in May planted out in rows three feet apart, two feet between plants. Any good soil that will grow cabbage will grow cauliflower, as their requirements are almost identical. If the weather is dry, water freely. The large leaves should be broken down over the flower heads as they appear, to keep the sun and rain from injuring them. To head in June they can be sown about the middle of August and September, transplanted into cold frames to protect during the winter, and set out early in the spring.

	Per pkt.	oz.
Early Favorite (new).—Another season's trial of this fine new variety justifies all that has been claimed for it. I offer it as the most desirable Cauliflower in cultivation, for either the market-gardener or private grower. It has proved superior to Erfurt or Snowball. It is the earliest in cultivation; producing very solid, pure white heads of the finest quality. Its dwarf habit and close outer leaves allow very close planting.	35c	\$5.00
Erfurt Earliest Dwarf.—Very sure to head; dwarf growing.	25c	4.00
Early Snowball.—A very early variety, with firm, solid, white heads.	25c	4.00
Early Paris.—Large and fine heads; very popular.	20c	1.00
Carter's Dwarf.—Early, large and excellent.	25c	1.50
Le Normand.—The best late sort	25c	1.00

CELERY.

Should be sown very early in the spring in open ground or in the hot-bed. When three inches high, transplant into a rich soil, finely pulverized, four inches apart. If the weather is dry press the earth well around the roots. Water and protect till well rooted, then transplant into rows from three to five feet apart, in well manured trenches a foot in depth, or on the surface, setting the plants from six to eight inches apart. If the tops are shorn off once or twice before planting, it will cause them to become stocky, and they will suffer less when transplanted. To blanch, draw the earth around the plants as they grow, from time to time, taking care not to cover the tops of the central shoots.

	Per pkt.	oz.
La Plume Chestnut (new).—A magnificent new half-dwarf white celery, having uncommonly large and solid leaf stalks, which possess a peculiar chestnut flavor, that is greatly admired by all lovers of good celery.....	10c	40c
Golden heart.—Half-dwarf in size, and habit of growth much the same as other half-dwarfs, except that when blanched the heart is large and full, of a golden, waxy yellow; early, solid and fine flavor, a splendid keeper, and a good winter variety.....	10c	30c
Crawford's Half-Dwarf.—This is now grown more extensively than any other by the market gardeners who supply New York City markets. When blanched, it is of rather a yellowish white, and is entirely solid, possessing the nutty flavor peculiar to the dwarf kinds, while it has much more vigor of growth...	10c	30c
Giant American White Solid. Grows to a large size; stalks white.....	10c	30c
American Dwarf White. Good early for general use.....	10c	30c
Henderson's White Dwarf. An excellent dwarf variety, very solid and crisp..	10c	30c
Boston Market. Medium size; solid, tender and crisp; Boston favorite.....	10c	30c
Sandringham Dwarf. A very choice and new variety.....	10c	25c
Dwarf Crimson. Solid, crisp, juicy and of fine flavor.....	10c	20c
Soup Celery. Old seed; excellent for flavoring.....		10c

CELERIAC, OR TURNIP-ROOTED CELERY.

Sow early in spring, in light rich soil, transplant in May into beds (not into trenches like other celery), water freely in dry weather. The roots, which form something like turnips, will be ready for use in October. This vegetable is very popular with the Germans, and is called by them German Celery.

	Per pkt.	oz.
Turnip Rooted	10c	25c

CHICORY.

A substitute for coffee, and much used for mixing with it. Cultivate like carrot. When dug cut into quarters or sixes, lengthwise, and string to dry. When wanted, roast and grind like coffee.

	Per pkt.	oz.	¼lb
Large rooted.....	5c	15c	35c

COLLARDS.

Sow like cabbage as soon as weather permits. To keep fit for eating some time transplant when a month old, in rows a foot apart each way, and hoe frequently.

	Per pkt.	oz.	¼lb
Georgia	5c	20c	50c

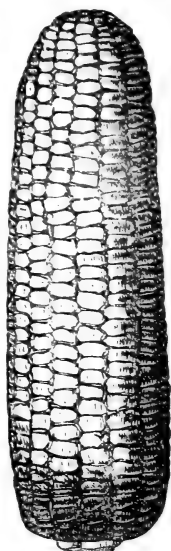
CORN--SWEET.

Plant about the middle of May or as soon as the ground is dry (if planted too early corn is apt to rot) in hills three feet apart each way; seven or eight kernals in a hill; hoe often and draw up soil to the stems; thin to four stalks and break off side shoots. Use plenty of old fine manure. For succession, plant every two or three weeks until the last of July.

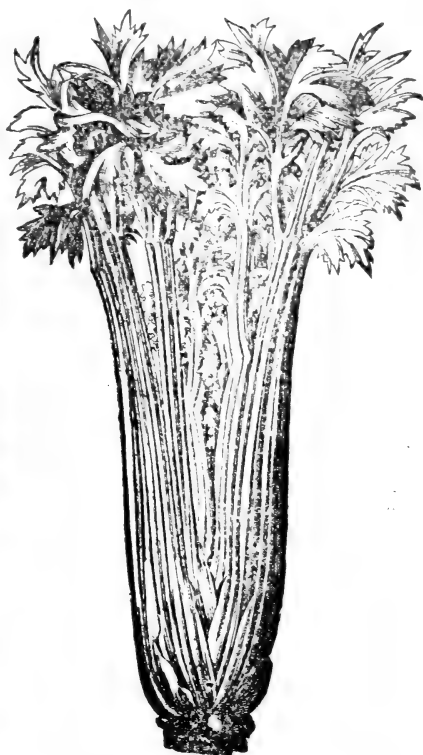
	Per pkt.	qt.
Extra Early Marblehead, (new). This sort is claimed to be the earliest of twenty-eight varieties tested by the originator. It is very early, habit dwarf, very productive, ears large for such an early variety, medium size cob, and very sweet, juicy and delicious	10c	30c
Amber Cream.—This handsome medium early sort is fast becoming noted among growers in all sections. It is of strong, rapid growth, ears large, averaging from ten to fourteen inches in length, which when fit for the table are white, handsome and very sweet. When dry the seeds are of amber color, varying from a light to a dark shade.....	10c	30c



Early Minnesota
Corn.
See Page 18.



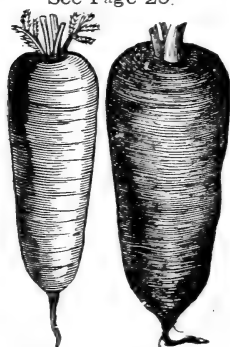
Mammoth Sugar
Corn.
See Page 18



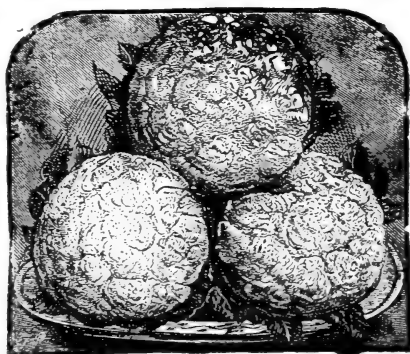
La Plume Celery.—See Page 18.



Cluster Cucumber.
See Page 20.



Scarlet
Horn. New
Danvers. Long
orange.
CARROTS.—See Page 17.



FAVORITE CAULIFLOWER
See Page 17.

	Per pkt.	qt.
Egyptian.—This is the best of the late varieties of sweet corn, and when better known, will, I am confident, become a standard variety for general cultivation. It is of vigorous habit, ears large, very sweet and tender, and of delicious flavor. Invaluable for canning.....	10c	25c
Extra Early Minnesota.—A very early and excellent sweet corn	10c	25c
Early Crosby's.—A few days earlier than Evergreen. Standard family.....	10c	20c
Stowell's Improved Evergreen.—Ears large, sweet, fine flavor.....	10c	20c
Mammoth Sweet.—The largest variety, and late. Very productive.....	10c	25c

POP CORN.

(Culture same as for Sweet Corn.)

	Per lb.
Rice Pop.—The best for popping. A very handsome variety; ears short; kernels long, pointed, and resemble rice; color white; very prolific; used entirely for parching, for which purpose it has no superior. In ears.....	10c

CORN SALAD, or FETTICUS.

Sow in drills a quarter of an inch deep and six inches apart, the latter part of August, or in September. Tread in the seed lightly if the weather is dry. Keep free from weeds, and cover thinly with straw or leaves just before winter, and is wintered over exactly the same as spinach.

	Per pkt.	oz.
Large Seeded.....	5c	15c
Small Seeded.....	5c	15c

CRESS, or PEPPERGRASS.

Salad a well-known pungent. Requires to be sown thickly and covered very slightly; sow at frequent intervals, to keep up succession, as it soon runs to seed.

Fine Double Curled.—Very fine, may be cut two or three times . . . Per pkt., 5c.; oz., 10c

CUCUMBER.

For early spring use, sow in hot-beds in February and March, or in a cold frame well covered with mats or straw at night, and plant out in rich, newly-dug ground, well manured, in hills or ridges about four feet apart. Cover at night if there is any danger from frost. For main crop plant the seeds in open ground as soon as the weather becomes warm and settled, in hills four feet apart, using a shovelful of well rotted manure to each hill. Cover manure with two inches of fine earth, and plant eight or ten seeds in each hill; cover these with one-half-inch of soil, firmly pressed down with the back of the hoe. Hoe often, and when out of danger of insects, thin out to three or four plants in a hill. Fruit should be plucked when large enough, whether required for use or not, for if left on the vines it destroys their productiveness.

	Per pkt.	oz.
Early Russian.—Earliest. Grows in pairs, three to four inches long.....	5c	15c
Early Cluster.—Next early to Russian. Small; productive; grows in clusters...	5c	15c
Early Frame, or Short Green.—Good for table or pickles.....	5c	15c
Green Prolific.—one of the best pickle sorts, very productive.....	5c	15c
Improved White Spine.—A favorite market sort, medium size.....	5c	15c
Early Boston Market.—A standard early market variety.....	5c	15c
Long Green.—An old favorite.....	5c	15c
London Long Green. A standard late sort, quite crisp, and of good size; not so early as the Spine or Frame, but is more desirable for late crop. It is the variety grown in New Jersey and other sections for pickling, and for that purpose should not be planted until late in July or early in August.....	5c	20c
Jersey Pickle.—A variety grown exclusively for pickling purposes by the market gardeners of New Jersey.....	5c	15c
West India Gherkin.—A small, prickly kind, for pickling only.....	5c	30c

DANDELION.

Seed should be sown in May or June, in drills half an inch deep, 12 inches apart. Plants will be ready for use the following spring.

Curled.....Per pkt., 10c.; oz., 40c

EGG PLANT.

Sow thickly in a hot-bed, and, if possible, prick out, that they may become *stocky*. When about four inches high, set out, thirty inches apart each way, in good, rich soil, when the weather has become warm and settled.

	Per pkt.	oz.
Early Long Purple.—Earliest.....	10c	30c
Improved N. Y. Purple.—Standard ; largest and best.....	10c	60c

ENDIVE.

(For salad, yearly growing more popular).

Sow from latter part of May to end of July, thinly in drills, and cover slightly. Thin out to eight inches apart when up, and give a good watering afterward, if dry. To blanch, when the leaves are six to eight inches long, gather them together in the hand and tie near the top with ropes or cover with boards ; must be done when dry, or they will decay. The crop may be taken up carefully, as winter approaches, with a ball of earth to each plant, and placed closely together in a cellar for use. Keep dry and give plenty of air, or they will rot.

	Per pkt.	oz.
Moss Curled, French —A beautiful curled variety of fine quality.....	10c	30c
Best Green Curled.—Leaves dark green ; very hardy.....	5c	20c

KALE—See Borecole.

KOHL RABI, or TURNIP ROOTED CABBAGE.

Half way between a turnip and cabbage, partaking of the nature and flavor of both. The bulbs are cooked like turnips. Sow from April to July ; plant and cultivate the same as cabbage. Set out in drills eighteen inches apart, and eight inches in the drill. As they are difficult to transplant they are sometimes sown where they are to stand, and afterwards thinned out.

	Per pkt.	oz.
Early Purple.—Both for early and main crops.....	10c	30c
Early White Vienna—Flesh white and tender.....	10c	30c
Large Green.—Very large and good.....	10c	40c

LEEK.

Sow as early in the spring as the season admits, either in seed-beds or places where they are intended to grow. When four inches in height thin to three inches. When six to eight transplant ten inches apart, leaving those in the drill about six inches apart. Set as deep as possible without covering the small center leaves.

	Per pkt.	oz.
American Flag.—A favorite market variety.....	10c	30c
Large Rouen.—Large and excellent.....	10c	40c

LETTUCE.

Sow in frames in March, or in the open ground as early as the weather will permit and transplant in rows one foot apart each way. Sow a month apart for succession. Sow seed thinly, and thin out to make strong plants. Hoe carefully and keep free from weeds. In October plant in frames to head in winter and early spring. Many gardeners set out between early cabbage and corn. Before these grow sufficiently to interfere the lettuce is cut and marketed, and after the corn is similarly disposed of a crop of turnips or rutabagas is raised on the same land.

	Per pkt.	oz.
Salamander, (New).—The Salamander is one of the best sorts for summer use : forming good-sized compact heads, color light green outside, and white on the inside. It will withstand drought and heat, and remain a long time in head before running to seed. To Market Gardeners is invaluable on account of its heat resisting qualities.....	10c	25c
Yellow Seeded Butter.—Like the preceding, this withstands summer heat well, and stands long before running to seed. It is a very distinct sort, making a large dense yellow head, very crisp and tender, and excellent in flavor. Its beautiful yellow heart gives it a very handsome appearance.....	10c	25c
Hubbard's Market.—A large cabbage head Lettuce, solid and fit for use from spring until autumn. It is very prompt to head and remains tender and crisp throughout the season. Seems to stand the summer heat, equally as well as the cool weather of spring. This, as well as above varieties must prove excellent for the South where it is so difficult to obtain good Lettuce.....	10c	25c

	Per pkt.	oz.
Black-Seeded Simpson. —One of the most desirable acquisitions that has been made to our list. Like the ordinary Curled Simpson, it does not properly form a head, but a compact mass of leaves; but it differs in being very much lighter colored, stands the summer heat excellently, and attains a size nearly double that of Curled Simpson.....	5c	25c
Green Fringed. —A handsome variety, of a peculiar shade of green, with the edges beautifully fringed, inner part of the leaves well blanched, making the most beautiful variety on the list and well worthy of cultivation.....	5c	25c
Black Seeded Tennis Ball. —Forms a close, hard head, with a few outer leaves; a favorite forcing variety.....	5c	25c
Early Curled Silesia. Good for summer use.....	5c	25c
Early Curled Simpson. Extra early and fine.....	5c	25c
Early Boston Market. The finest for forcing.....	5c	25c
Improved Head. Heads well, tender, of pink color; slow running to seed.....	5c	25c
Hanson's. Choice stock, heads very large, solid, tender and crisp.....	5c	25c
White Cos. Best of Cos varieties.....	5c	25c

MARTYNIA,

Plant in May, in the open ground three feet apart; leave one plant in each hill, or sow in hot-bed and transplant. Pick when the size of the little finger to make nice-looking pickles; for general use as long as a knife blade will penetrate easily, and when very large halve or quarter.

	Per pkt.	oz.
Martynia proboscidea.	10c	35c

MELON--(Musk.)

Plant late in spring—a light dry, sandy soil is the best—in hills five or six feet apart each way, well manured with old rotten compost; scatter a dozen seeds to the hill and after they are out of danger from bugs thin to three or four plants. Use plenty of tobacco, soot or wood ashes to keep off the bugs. When they have five or six rough leaves, pinch off the end of the main shoot, which will cause the lateral branches to put forth sooner and strengthen the vines. In the center of each light or sash of your forcing frames, plant one hill of melons for "early" and as radishes, etc., are taken out hill up and gradually uncover till finally exposed to the air. They are very apt to hybridize; the different kinds should be kept far apart.

	Per pkt.	oz.
Bay View. —This is a hybrid of the Cassaba with a large California musk melon. It is very large, fine flavored and remarkably productive, being a strong, vigorous grower. It has light green flesh, very thick, luscious and sweet. It will ripen up finely if picked quite green, making one of the best melons for shipping long distances.....	5c	20c
Improved Canteloupe. —During the past ten years particular attention has been given to the improvement of this variety, and it is fully considered by gardeners one of the finest in cultivation. It is of large size, thickly netted and deeply ribbed; flesh light green and most delicious flavor.....	5c	25c
Improved Christiana. —An early variety of peculiar flavor relished by many people. Remarkable for early maturity—separates from the vine when fully ripe and should be eaten at once; one of the best for family use.....	5c	20c
Hackensack. —Round in shape, flattened at ends, grows to large size; very productive and good flavor. The most popular variety in New York City markets.....	5c	15c
Surprise. —This melon has a thin, cream-colored skin, thickly netted; the flesh is deep salmon color, very thick and of exquisite flavor. It is a good bearer, round in shape, resembling the Nutmeg, early and a good keeper.....	5c	20c
White Japan. —Early, medium size, round; skin white, flavor good.....	5c	15c
Green Nutmeg. —Skin deep green, finely netted, sweet and good flavor.....	5c	15c
Skillman's Netted. —A green fleshed, of a slightly oval form, very sweet.....	5c	15c
Cassaba. —Large variety; shape oblong, flesh yellowish green, good flavor....	5c	15c
Pine Apple. —Early, juicy, sweet and perfumed.....	5c	15c

MELON--(Water.)

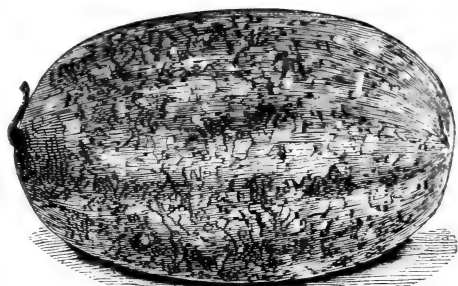
Plant in hills, six to eight feet apart, in May. Select light, dry, warm ground, and in preparing the hills let them be dug out broad, and deep as the soil will admit; fill at least one-third full of the best decomposed stable manure, and mix thoroughly with the soil. Filling up a little above the level of the ground. The plants will fruit better by occasionally pinching the leading shoots off the vines.



Early Frame Cucumber
See Page 20.



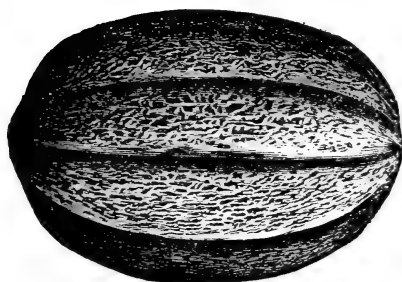
London Long
Green Cucumber.
See Page 20.



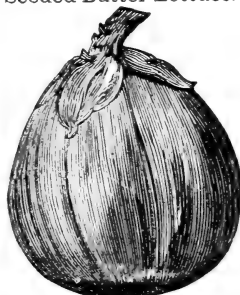
Dark Icing Melon.—See Page 22.



Yellow Seeded Butter Lettuce. Page 21



Bay View Melon.—See Page 22.



N. Y. Egg Plant.—See Page 21.



Hubbard's Market Lettuce.— See Page 21.



Improved Canteloupe Melon
See Page 22.

	Per pkt.	oz.	¼lb
Dark Icing.—One of the best melons in cultivation; solid, always of superior flavor, rind very thin. We catalogued Icing in 1872; it was grown then in the vicinity of South Bedd and was in great demand. Since that time I have been looking for something better, but have not found it. There are two types of this variety, one dark skinned, the other light. The light is a few days later, but in shape, size and flavor they are the same.....	5c	15c	50c
Georgia Rattlesnake.—This is becoming very popular on account of its fine shipping qualities; of oblong shape; light green color, beautifully striped; remarkably thin rind, deep flesh, which is scarlet, solid and deliciously sweet.....	5c	15c	40c
Cuban Queen.—Described as one of the largest melons known, vine vigorous; skin striped light and dark green, rind medium thick, flesh bright red. A very near relative to the Excelsior.....	5c	15c	50c
Haskell's Excelsior.—We have raised them weighing over forty pounds; thin rind; flesh scarlet; solid to the center.....	5c	15c	40c
Phinney's Early. Flesh deep red; oval, good flavor, productive.....	5c	15c	35c
Mountain Sweet. Oblong in shape, dark green, thin rind, red flesh solid and sweet.....	5c	15c	35c
Black Spanish. Large, round, dark skinned; flesh red and sweet.....	5c	15c	35c
Mountain Sprout or Carolina. A large, long, striped variety flesh red...	5c	15c	35c
Ice Cream. Medium size, skin light green, thin, flesh scarlet, crisp and sweet.....	5c	15c	35c
Orange. So called on account of rind separating from flesh when ripe...	5c	15c	40c
Citron. Used for preserves.....	5c	15c	40c

MUSTARD.

For salad, sow thickly in shallow drills six inches apart, during April and May, for fall use in September, pressing the earth well down; cut when about two inches high. For seed—in drills ten inches apart in April and gather in August.

	Per pkt.	oz.
White English. Best for salads.....	5c	16c

NASTURTIUM.

Sow in drills about an inch deep, in May and June. The tall kind near fences or poles where they can climb and have support.

	Per pkt.	oz.
Tall Nasturtium. Best for covering trellises, etc., eight feet.....	5c	15c
Dwarf Nasturtium. For pickling.....	10c	30c

OKRA or GUMBO.

Plant late in the spring after the ground has become warm, in drills two feet apart for the dwarf, where the plants are to remain. Thin out to one foot apart. Hoe and draw the earth up occasionally to the stems. Manure well. When young and tender the pods are a delicious flavoring for soup.

	Per pkt.	oz.
Thorburn's New. Dwarf; very prolific, bearing pods twice the size of the common variety.....	10c	20c
Dwarf White. Early and productive.....	5c	10c

ONION.

A strong, deep and rich loamy soil is most suitable for this crop. The ground should be heavily dressed with rich well-rotted manure, trenched deeply and ridged up early in autumn; if the soil is of a light sandy nature, cow manure will be the most suitable. The main crop should be sown as early as the ground may be in working condition, and whether this occurs in March or April, a favorable opportunity for putting in the seed should not be suffered to pass. After leveling down the ridges, if the soil is light, tread or roll the ground regularly, and closely over, and then rake and well pulverize the surface. Sow the seeds thinly and regularly, not over one inch deep. At the first weedings the earth should be drawn up a little to the plants, at the third or last weeding it should be brushed clean away with the fingers to give them a chance to bottom entirely out of the ground. A top dressing of wood ashes after the second weeding is very beneficial as will be observed by the dark and healthy change of color given to the plants. The same patch may be used year after year for onions, and can never be made too rich.

RELIABLE ONION SEED.—The seed I offer is raised from the finest selected onions, large and handsome in appearance, and is not surpassed by that of any other house; producing bulbs of fine form and keeping qualities, free from the objectionable stiff necks.

	Per pkt.	oz.	½ lb
Extra Early Red.—A fine early variety; close grained, ripens about the last of July	10c	20c	60c
Large Red Wethersfield.—Standard, large, deep red, good keeper.	5c	15c	40c
True Yellow Danvers.—One of the most popular sorts in cultivation, very productive, above medium size; globular in form; skin yellowish brown; flesh white, mild, and well flavored. By careful selection it has been improved so that in shape it is quite distinct from the old Yellow Danvers	5c	15c	40c
White Portugal, or Silverskin.—Flavor mild, fair size, handsome shape,	10c	30c	1 00
New Queen.—A silver skinned Tripoli Onion, as remarkable for its keeping qualities as for the rapidity of its growth	10c	35c	1 25
Giant White Italian Tripoli.—A new, excellent variety of quick growth and mild flavor	10c	25c	75c
Giant Rocca.—Light brown skin, of delicious flavor and globular form.	10c	25c	75c
Covent Garden Pickling.—Used exclusively for pickling	10c	25c	75c

ONION SETS.

Should be planted as early in the spring as the ground is dry enough to work. Plant in rows one foot apart, three inches apart in the row. They can be used in a green state or if left will ripen off by July. Potatoe onions may be planted in fall or spring, as they will survive the winter.

(Price Subject to Change.)

	Per qt
Yellow	30c
White	30c
Top or Button Onions	20c
Potatoe Onions	20c

PARSLEY.

Sow in drills one foot apart, covering half an inch deep in rich soil. Thin plants to four inches apart when two inches high. As the seed germinates very slowly, three or four weeks some time elapses before it makes its appearance. It should be sown early in the spring. It is a good plan to soak the seed a few hours in lukewarm water before sowing. To preserve in winter take out the plants and treat like celery.

	Per pkt.	oz.
Extra Moss Curled.—A very select stock, beautifully crimped and curled	5c	10c
New Fern Leaved.—A beautiful variety, like a crested fern	10c	20c
Plain Parsley.—The leaves of this are plain; it is hardier than the curled	5c	10c
Hamburg, or Turnip-Rooted.—A fleshy-rooted kind; roots used for flavoring soups	5c	10c

PARSNIP.

Sow in drills one-half inch deep and fifteen inches apart. When plants are two or three inches high thin out to six inches in the row. Hoe frequently. Soil should be rich and deep, well pressed or rolled. Take up what you may need for winter and store in cellar; leave the rest in ground till spring, where they keep better and become much more tender and sweet.

	Per pkt.	oz.	½ lb.
Hollow-Crown.—Roots long, white and smooth; best for general crop,	5c	10c	25c
Long Sugar.—One of the best	5c	10c	25c

PEAS.

(All Hand Picked.)

Plant as early as the ground can be worked, in single or double rows, from three to four feet apart, about an inch apart in the row, and three inches deep; in summer they should be planted six or eight inches deep. Hoe often to kill weeds and promote growth. A light, dry soil will bring them to maturity earlier, especially if manured the previous season, but should not be manured too highly at time of planting. The height to which all peas grow depends in a great measure upon the soil and season. In a rich soil and a wet season they will sometimes outstrip all expectation, and the seedsman is likely to be blamed for selling spurious seed. For succession plant every two weeks during the season.

☞ Wrinkled varieties marked thus * should be planted thicker, being liable to rot.

	Per pkt.	qt.
Harman's First and Best.—This has been carefully selected and podded for the past 5 years from our Extra Early Pea, and possesses all the good qualities required of an extra early, being the earliest, of dwarf habit, even growth, free from runners, and productive; matures for table forty-five days after germination, and ripens all the pods within a very few days, so that the ground can be cleared and planted with another crop. The best Pea by far for the market-gardener to grow. 2½ feet.....	10c	35c
* American wonder. (True).—A very early, green wrinkled dwarf variety, of robust habit and compact growth. It is very productive, on good soil having averaged from 10 to 15 pods on each vine, with six to eight peas to each pod. The vines grow from 10 to 15 inches high. It is very sweet and combines the good qualities of the Gem and Champion, from which it originated. 1 foot.....	10c	40c
* Telegraph.—This is an extraordinary acquisition, the Peas often being so close together as to appear to be forming a double row in the pod. It is a fine second early variety, very robust in habit, bearing immense pods containing 10 to 12 very large peas in each pod; the peas, when cooked, are of a fine, deep green color; a great bearer, and of fine flavor. 5 feet.....	10c	40c
Carter's First Crop.—An English variety; very productive, good flavor, 2½ feet.....	10c	30c
Early Kent.—A very early sort carefully selected; 2½ feet.....	10c	25c
Early Dan O'Rourke.—One of the earliest market varieties; 2½ feet.....	10c	25c
Blue Imperial Dwarf.—A great bearer and fine flavored; 3 feet.....	10c	30c
Tom Thumb.—Very dwarf, not exceeding nine inches in height.....	10c	30c
Royal Dwarf Marrow.—Similar to White Marrow, with stiffer vine; more dwarf in growth and earlier; 1½ feet.....	10c	25c
McLean's Blue Peter.—A smooth, blue variety; very early; 1 foot.....	10c	35c
White Marrow.—One of the largest varieties in cultivation; 6 feet.....	10c	25c
Black Eye Marrow.—An excellent variety for garden and field culture.....	10c	20c
* McLean's Little Gem.—A dwarf green wrinkled marrow, of splendid flavor and a great bearer; very early; 1 foot.....	10c	35c
* Extra Early Premium Gem.—A dwarf variety of the type of the Little Gem, growing stronger in vine, with larger pods and more prolific; 1½ feet.....	10c	35c
* Champion of England.—(Improved Stock)—One of the best varieties grown, very sweet, tender, and a great bearer; 5 feet.....	10c	30c
Kentish Invicta.—About five days later than Dan O'Rourke, ripens altogether; pods of a fine green color; very prolific, and of excellent flavor. A very good market variety; 2½ feet.....	10c	35c
Dwarf Sugar.—Edible pods; used in a green state, like string beans; 2 feet....	10c	45c
Canada Field.....	Market price.	

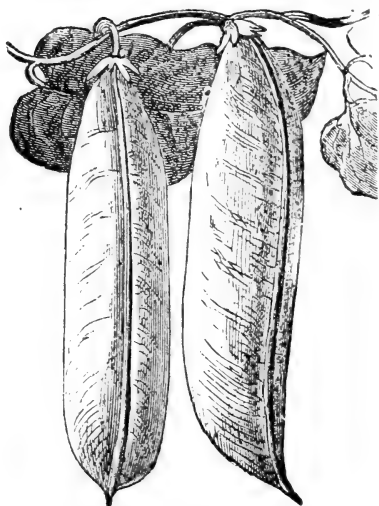
PEPPER.

Sow early in a hot-bed, in the Northern and Middle States, or in the open ground, about the middle of spring, in a light, warm soil. Transplant when three inches high, one foot apart, in eighteen inch drills, and earth up a little at one or two hoeings. Guano, hen dung, or any other kind manure applied upon the surface and hoed in when the plants are about six inches high will increase the crop.

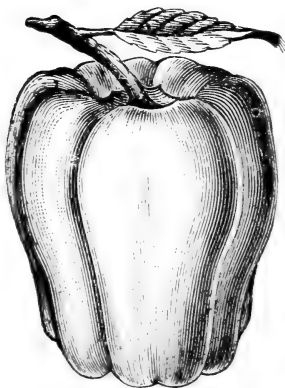
	Per pkt.	oz.
Golden Dawn (new).—In shape and size similar to the Large Bell, but different from it in two particulars. Unlike most mangoes, even the seeds may be chewed without detecting the slightest fiery flavor. It is of a beautiful golden color, and makes a fine appearance on the table, especially when mixed with red varieties.....	10	
New Cranberry.—An interesting variety; fruit resembles in appearance the Cranberry; one of the best pickle sorts.....	10c	50c
Sweet Mountain.—For mangoes; very large and mild; used for stuffing.....	10c	35c
Large Bell, or Bull Nose.—Early; mild; rind thick, fleshy, and tender.....	10c	35c
Cayenne.—For spicing pickles.....	10c	35c
Red Cherry.—Small, smooth and round.....	10c	35c

POTATO.

The soil best suited to the potato is that of a rich, sandy loam, but seems to thrive almost in any soil or climate, not requiring heavily manured ground to insure a crop; if heavily manured they are more liable to disease than in naturally good soil. The best fertilizers are plaster, lime, super-phosphate of lime and bone dust, for heavy and wet soils,



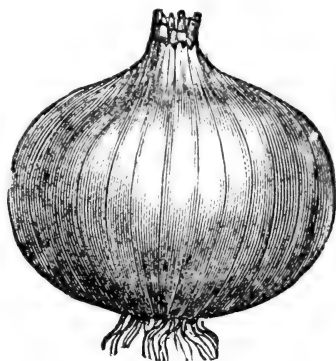
Harman's First and Best Pea.
See Page 26.



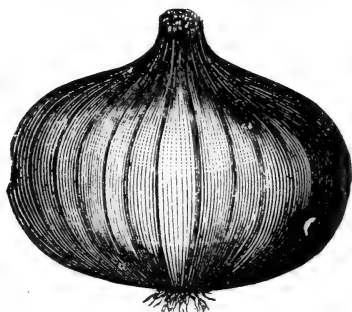
Golden Dawn Pepper.
See Page 26.



New Early Sunrise Potato.
See Page 28.



Danver's onion.—See Page 25.



Wethersfield Onion—See Page 25.



American Wonder Pea.
See Page 26.

especially as they promote growth, and at the same time prevent disease. Plant as early in the spring as the ground can be thoroughly worked, in rows three feet apart, and in the rows one foot apart; when planted in hills 3 to 3½ feet is usual distance; the latter method allows the Horse Hoe to be used both ways of the field. Cover in light, warm soil about four inches and in cold, wet ground two inches deep. Cultivate to keep down weeds and draw the earth to the plants. When the blossoms appear cultivating should be discontinued. If the Colorado Beetle (Potato Bug) makes its appearance the vines should be dusted with Paris Green mixed with about 200 parts of plaster, and applied while the dew is on.

All Northern Grown. Selected for Seed.—Three pounds of any of the following varieties sent by mail on receipt of \$1.25.

	Peck.	Bu..
NewEarly Sunrise.—The coming early potato. It has proved itself the earliest of all producing potatoes fit for the table in fifty-two days from the time of planting. The tubers are oblong, large, solid, uniform and handsome flesh white, fine grained and dry, cooking well, even when first dug; very productive and of fine keeping qualities; vines dark green, good, strong growers. This new variety has given more universal satisfaction than any new sort ever offered. The twelve largest potatoes in a crop grown from one pound in sixty-seven days weighed twenty-five pounds, eleven ounces..	\$1.00	\$3.00
New Conqueror.—Is a seedling from the Peachblow, ripening its crop about two weeks later than the Early Rose. The tubers are usually round and symmetrical in form, lying compactly in the hill, skin slightly russeted, flesh fine-grained, white and of fine-flavor. It is a great cropper, free from rot and never hollow..	1.00	3.00
Late Beauty of Hebron—I know of no more desirable medium late variety than this. It resembles the Early Beauty of Hebron, but excels it as a cropper. The same potato varies on different soils, but if this does as well for others as it has done for us, it is a variety worth having.....	.50	1.75
Wall's Orange.—A new seedling of great promise; the yield has been enormous; the quality is excellent. The vines are very stout, have a remarkably dark green color and prove to be exceptionally hardy and vigorous, withstanding the attacks of the potato bug better than most sorts.....	1.00	3.00
Telephone.—Tubers large and handsome; skin smooth, white; flesh white and fine grained; a vigorous grower and good keeper; very productive and matures early.....	1.00	3.00
New Blush.—Tubers are of medium size and very uniform—never growing very large and yielding few small ones; vines bear small leaves; stems are notable for their branching habit and slenderness. They seldom bloom profusely and in field culture occupy less space than most other kinds. The Potato is first quality; skin is white except at the seed end, where it assumes a rosy color, from which the name of BLUSH was suggested.....	1.00	3.50
I have a large supply of White Star, Clacki, No. 1, Chicago Market, Early Ohio, Early Beauty of Hebron, St. Patrick, Queen of the Valley, Magnum Bonum, Mammoth Pearl, White Elephant, Burbanks, Early and Late Rose, etc. Prices by letter.		

POTATO—SWEET.

Yellow Jersey Sweet.—True Jersey grown seed (not mailable)..... Peck, 75c

PUMPKIN.

Cultivate same as squash, or plant in the spring amongst the Indian corn. Avoid planting near other vines.

	Per pkt.	oz.	½lb.
Large Tours.—French; sometimes weighing one hundred and fifty lbs..	10c	25c	
Large Yellow Field.—Very productive; largely grown for feeding stock..	5c	10c	15c
Large Cheese.—The best variety for cooking purposes.....	5c	10c	38c

RADISH.

The soil for Radishes should be rich, light and mellow, well broken by digging as their tender and mild qualities depend much upon their rapid growth. For very early use they may be sown on gentle hot beds in February, and in the open air as soon as ground can be worked, at intervals of ten or twelve days for succession, as long as they may be wanted. The winter varieties should be sown in August and lifted before severe frost and stored in the cellar.

Earliest Market —This variety, which I named and introduced two years ago, is certainly very desirable—especially for market growers. It is quite distinct from any other variety; in shape between turnip and half long; skin pure white, juicy, delicate and crisp; leaves short. It is very handsome and re-

	Per pkt. 10c	oz. 25c
markably early. It sells better than any other variety in South Bend market.		
Mammoth Purple Top.—A native (so far as I can learn) of Northern Indiana. It has been kept very exclusive. I now offer the seed for sale and hope purchasers will write me their opinion of it. It grows to a foot or more in length and two inches in diameter. White skin, except purplish tinge where it grows above ground. Flesh white, tender and sweet—never pithy.....	5c	15c
Woods' Early Frame.—Very early, fine for forcing, in shape half long; scarlet	5c	10c
Early Long Scarlet.—A Standard variety.....	5c	10c
Early Scarlet Turnip.—White tail. An early variety of handsome appearance	5c	10c
Early Scarlet Turnip.—Very quick growing.....	5c	10c
Early White Turnip.—Same as above except in color.....	5c	10c
Early Scarlet Olive.—A very early and handsome variety.....	5c	10c
Early White Olive.—Different from the above in color only.....	5c	10c
Early French Breakfast.—Excellent for hot bed or open air culture.....	5c	10c
Yellow Globe.—Excellent to stand the heat and drouth of summer.....	5c	10c
Rose China Winter.—Bright Rose Color, flesh firm and piquant.....	5c	15c
Black Spanish.—One of the hardiest and best for winter use.....	5c	15c
Chinese White Winter.—Except in color this is similar to Rose China Winter..	5c	15c
California Mammoth White.—A giant white Fall Radish of excellent quality..	5c.	20c

RAPE.

Cultivated extensively for forage; for the seed, and used as a salad like mustard. As a forage plant it yields abundantly; fed green it is very nutritious and stock of all kinds are fond of it. Sow in May, either in drills or broadcast.

Rape.—Best English Per oz. 5c.

RHUBARB.

Sown in spring in drills eighteen inches apart; cover one inch deep; thin plants to six inches. In the fall trench a piece of ground and manure it well; transplant the young plants into it, three feet apart each way. Cover with litter the first winter; a dressing of coarse manure should be given every fall.

	Per pkt.	oz.
Linnaeus.—Large, tender, fine.....	5c	25c
Giant.—Very large and tender.....	5c	25c
Rhubarb Roots.—See <i>Vegetable Plants</i> .		

SALSIFY—Ovster Plant.

Cultivate same as Carrots and Parsnips; it is also hardy, and can remain in the ground all winter for early spring use. Succeeds best in a light, well enriched mellow soil, dug two spades deep. Sow early in the spring in drills 15 inches apart, one inch deep; and thin out to six inches apart in the rows; keep clear of weeds.

	Per pkt.	oz.
Long White.—Good for fall or spring; freeze like parsnips.....	10c	30c

SPINACH.

For spring and summer use, sow either broadcast or in drills one foot apart, as early as the ground can be worked, and every two weeks for a succession; as it grows thin out for use; keeping it clear of weeds. For winter and early spring use, sow in September in well manured ground; cover with straw on the approach of cold weather. The ground cannot be too rich; the stronger the ground the more delicate and succulent will be the leaves.

	Per pkt.	oz.	¼lb.
Long Standing.—New imported, from Holland, (the foremost country for Spinach;) can be cut longer than any other sort, a great improvement	5c.	10c	30c
Bloomsdale Savoy.—Leaves thick, large and fleshy; a fine market variety producing nearly twice the weight of crop of ordinary sorts. very hardy.....	5c	10c	25c
Round Leaf.—Seed smooth and round, leaves thick and fleshy, slightly crimped.....	5c	10c	25c
Prickly.—This is a hardy variety; seeds prickly.....	5c	10c	25c
Round-Laved Viroyflay.—A splendid variety of Lettuce-leaved Spinach, with leaves much longer and broader, round, thick, fleshy, dark green.....	5c	10c	25c

SQUASH.

Prepare the ground by thoroughly pulverizing it. Manure highly. All vines delight in warm and rich soil. Plant in hills from nine to ten feet apart for running varieties, five to six for bush sorts, working some fine, rich manure into each hill. Plant eight or ten seeds, and when out of danger of bugs leave only two plants to a hill. Keep well covered with plaster or air-slacked lime in the early stages of growth. Cultivate till runners are well started.

	Per pkt. oz.	
Perfect Gem.—The fruit is cup-shaped and seldom exceeds six inches in diameter. The flesh is fine in texture and of delicious flavor. Though the first fruit reaches maturity quite as early as the summer squashes, the vines continue to produce until cut by frost. It has excellent keeping qualities and ranks in this respect with the best of winter squashes.	10c	20c
Essex Hybrid.—A cross between the Hubbard and the American Turban, has the color, shape and fine qualities of the Turban, with the dryness and hardness of the Hubbard. It is not only one of the richest flavored, finest grained and sweetest varieties we have, but also one of the very best keepers....	10c	20c
White Bush Scalloped.—An early market variety, excellent for shipping.....	5c	10c
Yellow Bush Scalloped.—A sub-variety of the above, differing only in color...	5c	10c
Long Yellow Crook-Neck Bush—Early, productive and of good quality.....	5c	10c
Hubbard.—A great favorite and more largely grown than any other.....	10c	20c
Mammoth French.—Grows, to a large size, often weighing two hundred pounds.....	15c	30c

SUNFLOWER.

The Sunflower is rapidly acquiring a reputation as a valuable farm crop. Its seeds are excellent food for poultry and the manufacture of oil. The leaves are claimed to make excellent cattle fodder. The plant affords efficient protection from malaria and should be liberally planted about the house in all districts where that insidious disease prevails.

	oz.	lb.	pck.
Mammoth Russian.—Heads more than a foot across.....	5c	35c	\$1.75
Large Common.....	5c	25c	1.25

TOBACCO.

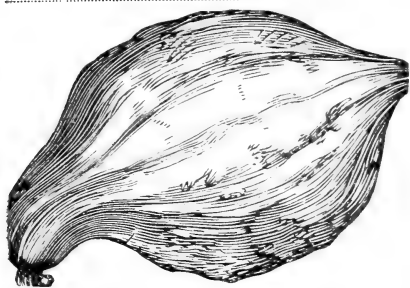
Seeds may be started in hot beds or sown in the open ground as soon as the ground can be worked, in rich, dry soil: rake off the bed and sow broadcast, pressing down evenly and firmly; keep free from weeds and water frequently if the weather is dry; set on; the first of June, three feet apart, in land that has been heavily manured; look out for the tobacco worm, which must be removed as soon as it appears, or it will destroy the crop.

	Per pkt. oz.	
Connecticut Seed Leaf.....	10c	35c
Havanna.....	10c	50c
M. O. Broad Leaf.....	10c	35c

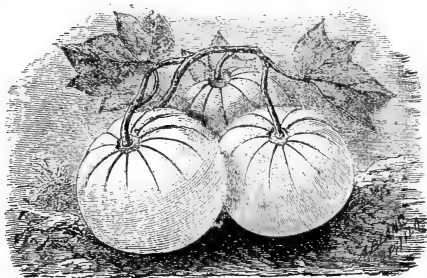
TOMATO.

Sow in hot beds in march. Transplant into open ground when the weather becomes warm and settled, or sow in open ground in May, and transplant when plants are six inches high. The richer the soil, the more handsome and plentiful the fruit; but if it is desirable to have the fruit ripen as early as possible select rather light, poor soil and a sunny location. Plant in hills four feet apart each way. To hasten the maturity of the first crop pinch off the extremities of the tops and all the secondary shoots which afterwards appear above the flowers

	Per pkt. oz.	
Livingston's Favorite.—The largest perfect shaped Tomato, in Cultivation, smoother than the Paragon, does not crack or rot, is a very dark red in color, ripens evenly and as early as any good variety, holding its size to the end of the season; very prolific, good flavor, few seeds, flesh solid, bears shipping long distances. My stock of seed is direct from the originator.....	15c	60c
Livingston's Perfection.—Larger in size than the Acme and a little smaller than the Paragon; color, blood red; as early as the Canada Victor, almost round in shape, perfectly smooth, and very solid, of the best quality, enormously productive, bearing all through the season until frost. As it has a tough skin, it will be found very valuable for shipping purposes.....	5c	40



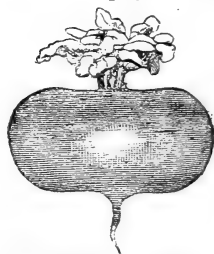
Hubbard Squash.—See Page 30.



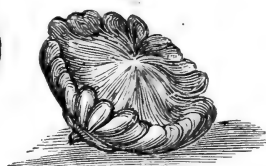
Perfect Gem Squash.—See Page 30.



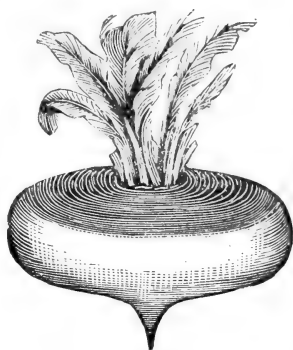
Trophy Tomato.—See Page 32.



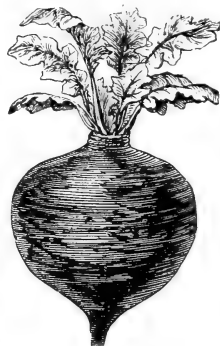
Flat Dutch Turnip.
See Page 32.



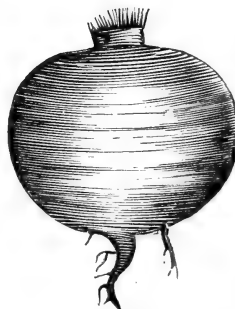
Bush Scallop Squash,
See Page 30.



Purple Top Turnip.
See Page 32.



Swede Turnip.—See
Page 33.



Swede Turnip—See
Page 33.

	Per Pkt.	oz.
Essex Early Hybrid.—A new variety similar to Acme, but with larger, darker colored fruit which is always smooth and handsome. An abundant bearer, ripening all over evenly with no green spots around the stem	5c	40c
Extra Early.—Grows to a good size, ripens well around the stem and does not crack after a rain; worthy of its trial by every gardener. My stock of that variety was saved from specimens ripened inside of 100 days from the time of sowing the seed	5c	40c
Mayflower.—Mr. Hosford, of Vermont, claims that he has in this the earliest large Tomato yet introduced; that it is fully as early as Acme and a third larger, of splendid shape, perfectly smooth, of a bright red color and ripens uniformly up to the stem; flesh solid, free from seeds and of a pure, rich flavor	5c	40c
Acme.—One of the earliest; produces an abundance of handsome fruit of a dark red color, slightly tinged with purple, has few seeds, is free from core and of a delicious flavor	5c	40c
Queen.—A recent introduction, somewhat resembling Trophy. It is recommended for canning and around Baltimore is extensively grown for this purpose	5c	40c
Paragon.—A second early; fruit large; color, bright, glossy crimson; smooth, solid, excellent flavor; bears transportation well; an excellent market variety	5c	40c
Canada Victor.—Fruit heavy, full meated and of rich flavor	5c	25c
Hathaway's Excelsior.—Early; medium size; an excellent variety	5c	25c
General Grant.—Very productive and of finest flavor	5c	25c
Large Smooth Red	5c	25c
Trophy, True Select.—Saved from selected specimens only	5c	40c
Golden Trophy.—Same as Trophy, except in color, which is a golden yellow..	5c	40c
Red Cherry	5c	30c
Yellow Cherry	5c	30c
Red Currant	5c	40c
Yellow Pear	5c	30c

TURNIP.

For the Spring crop sow the early sorts as early as the seed can be got into the ground, in fourteen-inch drills, and thin to five or six inches. For the fall and main crop, sow, at the north, from the middle of July to the last of August, in drills as directed for the spring sowing. In the field, Turnips are generally sown broadcast, though much the largest crops are obtained by drill culture. Land newly cleared and burnt over, and old pasture ground, plowed two or three times during the summer, and well manured with thoroughly rotted manure or guano, and ashed at the time of sowing, will produce the clearest and sweetest turnips. The sowing should always be done just before a rain, if possible, for the success of the crop depends in a great measure upon quick germination and a rapid and free growth at first. As soon as the first leaves appear, sprinkle with soot, wood ashes or air-slacked lime, to destroy the little black fly, which will devour the plants, if not attended to in time; keep the ground well stirred and clear of weeds.

The Ruta Baga, Swedish or Russian varieties are grown principally for feeding stock, and are also excellent for the table early in the spring. Sow in drills 2 feet apart from the middle of June until the first of August; and when large enough to resist the attack of insects, thin out to stand eight inches apart in the rows; cultivate to keep them clear of weeds.

	Pet pkt.	oz.	$\frac{1}{4}$ lb
Early Purple Top Munich.—A very handsome, early turnip; earlier than any other sort. Color white, with bright purplish red top; of fine quality when young. I recommend this variety as the best for first crop	5c	10c	30c
Early white Flat Dutch.—Very useful variety for first crops	5c	10c	30c
Cow Horn.—Roots carrot shaped. Matures quickly; excellent for table use	5c	10c	30c
White Top Strap Leaf.—Quick growth; of excellent quality,	5c	10c	30c
Purple Top Strap Leaf.—One of the best varieties for general use	5c	10c	30c
White Egg.—New variety, shaped like an egg; good size, white flesh....	5c	10c	30c
Harman's Genuine Golden Ball.—Yellow standard; very popular, rich flavor, quick grower, bright yellow skin, cream colored flesh, good keeper, round in form	5c	10c	30c
Purple Top White Globe.—An early sort of globular form, in other respects similar to Purple Top Strap Leaf—a handsome looking bulb, and as it is an enormous cropper is becoming very popular with market-gardeners	5c	10c	30c

	Per pkt.	oz.	1/4 lb.
Orange Jelly.—Round in shape, cream-colored flesh, yellow skin.....	5c	10c	30c
Yellow Aberdeen.—Globe shaped, tender, solid; flesh pale yellow.....	5c	10c	30c
White Globe.—Globular shaped, small tap root; flesh white.....	5c	10c	25c
Large White Norfolk.—Large size; skin white; flesh sweet.....	5c	10c	25c

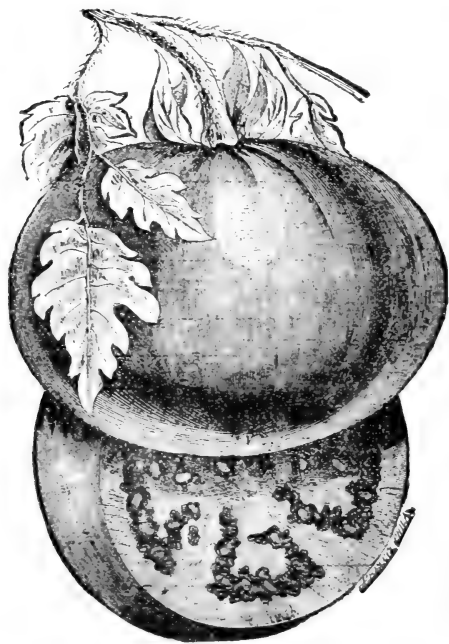
RUTA BAGA, RUSSIAN, or SWEDISH TURNIP.

	Per pkt.	oz.	1/4 lb.
Skirving's Purple Top.—Yellow below ground; one of the best varieties..	5c	10c	25c
Carter's Imperial Swede. Highly recommended as producing great crops	5c	10c	25c
White Sweet Russian.—A large, solid, white variety; rich and sweet..	5c	10c	25c

HERBS.

Herbs delight in a rich, mellow soil. Those marked with an * are perennial. No garden is complete without a few sweet, aromatic or medicinal herbs for flavoring soups, etc., and care should be taken to harvest them properly. This should be done on a dry day, just before they come into full blossom; then dry quickly in the shade, pack close in dry boxes excluding them from the air.

	Pkt.	oz.		Pkt.	oz.
Anise.....	5c	10c	* Horehound; height 2 feet.....	10c	50c
* Balm; height one foot.....	10c	50c	* Lavender; height 2 feet.....	5c	25c
Basil Sweet height 1 foot.....	5c	30c	Marjoram, Sweet; height 1 foot.....	10c	40c
Borage; height 3 feet.....	5c	30c	* Rosemary; height 4 feet.....	10c	50c
* Caraway; height 2 feet.....	5c	10c	* Rue; height 2 feet.....	5c	30c
Coriander; height 2 feet.....	5c	10c	* Sage; height 18 inches.....	5c	30c
Dill; height 3 feet.....	5c	15c	Savory, Summer; height 1 foot..	5c	25c
* Fennel, Sweet; height 6 feet..	5c	15c	Thyme.....	10c	40c



Livingston's New Early Favorite
Tomato.—See Page 30.

MISCELLANEOUS.

	Per lb.
Rape.....	15c
Mixed Bird Seed.....	10c
Hemp.....	10c
Canary.....	10c
Lettuce Seed, for Birds.....	50c
Broom Corn, Evergreen.....	20c
Water Melon, for medicinal purposes.....	50c

Look for Club Order Premiums on
Fourth Page of Cover.

VEGETABLE PLANTS AND ROOTS.

*Prices on all Vegetable Plants for larger quantities than specified will be given on application.
Sent by Express at purchaser's expense.—No plants sent C. O. D. or by mail.*

ASPARAGUS ROOTS.

Conover's Colossal.—Two years old Per 100, \$1.00. Per 1,000, \$8.00

CABBAGE AND CAULIFLOWER PLANTS.

By the hundred or thousand, or in larger quantities. Early varieties will be ready about May first. The late varieties through June and July.

"True" Jersey Wakefield, Early Summer, Fottler's Improved, Newark Early Flat Dutch, Winningstadt, per 100, 75c. ; per 1,000, \$4.00. Large Drumhead, Excelsior and Premium Flat Dutch, Marblehead Mammoth, per 100 40c. ; per 1,000, \$3.50.

Early Favorite and Dwarf Erfurt Cauliflower, per 100 \$2.50.

CELERY PLANTS.

Ready from June 15th, and through August. New Golden Heart, Sandringham, White Dwarf, Crawford's Half Dwarf, American Dwarf, White Giant Solid, Boston Market, per 100, 50c. ; per 1,000, \$4.00.

PEPPER PLANTS.

Ready May 10th. Golden Dawn, Large Bell, Sweet Mountain, per dozen, 75c. ; per 100, \$5.00

TOMATO PLANTS.

Ready May 1st. Favorite, Essex Hybrid, Perfection, Alpha, Acme, Selected Trophy, General Grant, Excelsior, Large Smooth Red : per dozen, 25c. ; per 100, \$1.50.

SWEET POTATO PLANTS.

Ready May 25th. Yellow Jersey, from New Jersey grown seed, the best, per 100, 60c. ; per 1,000, \$4.00.

RHUBARB ROOTS.

May be planted spring or fall. Set 3 feet apart each way. When once planted will remain in bearing condition for three or four years ; 25c. each ; per dozen \$2.50.

Insect Exterminators.

Whale Oil Soap, 2 lb. pkgs, 35c. ; 5 lb. box, 80c.
White Hellebore, price 50c per lb.

Persian Insect Powder, price per 14 lb., 30c. ;
per lb., \$1.00.

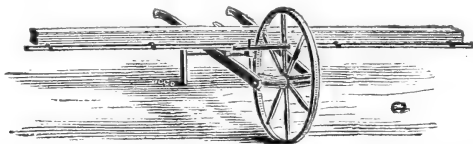
Tobacco Dust, price 10c. per lb. ; per 100 lbs.
\$7.50.

Tobacco stems, in bales of 100 lbs., \$4.00.

Sulphur (Flowers of) 15c. per lb. ; per 15 lbs.,
\$1.50.

Horace's Tobacco and Hellebore Insecticide
in patent bellows boxes, 25c.

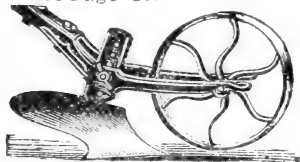
Palmer's Plant and Vine Protector ; per lb.,
25 cents ; 10 lbs., \$2.00.



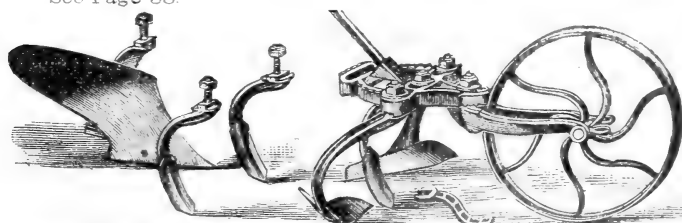
Thompson's Wheelbarrow Seeder.— See Page 40.



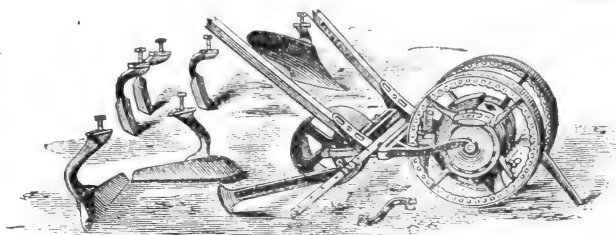
Isbell Mole Trap.
See Page 40.



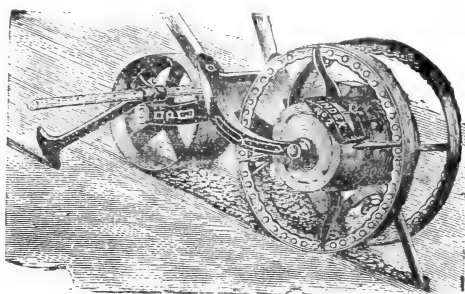
Firefly Wheel Garden Plow.
See Page 38.



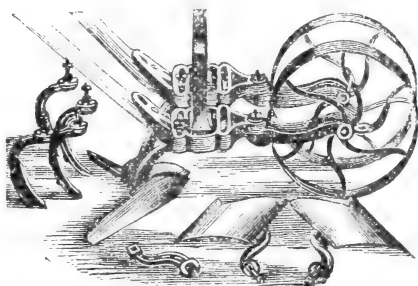
"Firefly" Single Wheel Hoe, Cultivator and Plow Combined. -Page 38



Planet Jr. Combined Drill, Wheel Hoe, Cultivator, and
Plow. - See Page 38.



Planet, Jr., No. 2 Drill. See Page 38.



Planet, Jr., Double Wheel Hoe, Cultivator and Plow Combined. - Page 38.

Grain and Field Seeds.

NEW WINTER WHEAT—MEDITERRANEAN HYBRID. A hybrid of the Deihl and Red Mediterranean, originated some five years ago in New York. It has proved extremely hardy and very prolific, and has been pronounced by experts very superior for flour. It has the beard and blue straw of the Mediterranean, and the remarkably compact head, stiff straw, and plump berry of the Deihl. It stands at least one-third thicker on the ground than Fultz, Clawson, or Mediterranean. My stock is direct from the originator, and is pronounced the "coming wheat." E. S. Carmen, editor of the Rural New Yorker, speaks very highly of the result of his test on the Rural Farm in last year's Fair Edition of the Rural. Price: Per quart, 30c.; quart, post-paid, 50c.; peck, \$1.75; bushel, \$5.00.

WHITE BELGIAN OATS. This new sort is considered to be a most desirable and promising variety. It is a great yielder. On the same land, grown side by side, the White Belgian produced double the crop of common oats, while they were of finer quality, and much greater weight per measured bushel; they frequently weigh from 43 to 45 pounds per bushel. The grain is very plump, with thin husk. The straw is of extra quality, bright, large and strong enough to support the large heads. It is well adapted for general culture, as it is very hardy, and thus far has proved free from rust. Per 3 lbs., by mail, \$1.00; per half bushel, by express or freight, \$1.25; per bushel (32 lbs), \$2.00.

FIELD CORN. Special descriptive circular and price-list of field corn mailed free to all applicants.

SILVER HULL BUCKWHEAT. This variety is a great improvement upon the ordinary Buckwheat. Sown at the same time as the common Buckwheat, it continues in bloom longer, matures earlier, and yields nearly double under the same conditions. The husk is thinner, flour whiter and more nutritious. Price: per peck, 50c.; per bushel, \$1.75.

EARLY AMBER SUGAR CANE. A variety of Sugar Cane, which has been largely tested in many parts of the country, with very general success. Its distinctive features are its earliness and great yield of both sugar and syrup. Culture the same as for corn. Quart, 25c.; bushel, \$4.50. If by mail, add 25 cents for postage.

SPRING RYE. Price according to market.

WINTER RYE. Price according to market.

BARLEY. Price according to market.

GRASS AND GLOVER SEEDS.

PRICES subject to change to correspond with the market; quotations given on application.

IN FORMING NEW LAWNS.—Prepare the grounds well; the best soil for the purpose is a rather stiff or heavy loam and should be as much alike in quality as possible over the whole surface, and do not stint the required amount of seed necessary to make a thick sod. The ground should be thoroughly plowed, sub-soiled and harrowed, removing all roots and stones. For small plots digging, trenching and raking may be done; apply fine bone dust or Peruvian guano, avoiding stable manure as it contains weed seeds. Sow the seeds in March, April or May, the earlier in the season the better, using three bushels per acre or about five quarts to six rods of land, of Harman's best Lawn Mixture. If the seed is sown late in the spring a sprinkling of oats should be sown at the same time to protect the young grass from the sun. If you cannot prepare your ground in the Spring, the seed may be sown in September. The lawn should be neatly kept by frequent cutting; this should be done every week or two. Use lawn mowers in preference to the scythe.

Harman's Mixed Lawn Grass.—The finest and best mixture of neat, compact growing varieties, producing a fine sward. Per quart, 20c; per bushel, \$5.00.

Sweet Vernal Grass...... Per lb. 65c.

English Rye Grass..... " 25c.

Wood Meadow Grass..... " 60c.

Kentucky Blue Grass (ex. clean).. " 30c.

—MILLET.—

German or Golden Millet, about \$2.00 per bushel.

Common Millet, about \$1.75 per bushel.

Hungarian (Grass) Millet, about \$1.75 per bushel.

Orchard Grass, about \$3.50 per bushel.

Red Top, about \$1.50 per bushel.

Timothy or Herd Grass, about \$2.50 per bushel.

—CLOVER.—

Medium Red..... } Market Price.
Mammoth Red..... }

White Dutch..... Per lb., 35c

Lucerne or Alfalfa..... " 35c

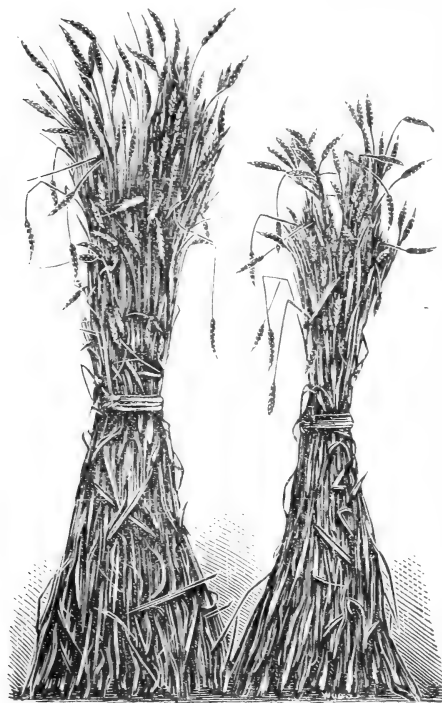
Alsike..... " 30c

Bokhara, or Melilot..... " 35c

Annual forage plants, valuable for furnishing green fodder and hay in from 60 to 90 days from the planting of the feed. The large, luxuriant leaves, juicy and tender, are much relished by stock.

Pearl Millet, (3 to 5 pounds required to sow an acre). Per lb. 30c.

FERTILIZERS.



soil being sand and clay loam. Each had the same chance, with one exception—the best had at the rate of two hundred pounds to the acre of HOMESTEAD SUPERPHOSPHATE. This wheat was cut the 11th day of June, 1880, and weighed at the time of cutting 6½ pounds and 3 pounds respectively.

I hereby certify that the above statement is correct, according to the best of my knowledge and belief.

HUGH HOOK.

Sworn to and subscribed before me, this 13th day of August, 1880.

ANSEL B. PIERCE, Notary Public, Wayne Co., Mich.

JAMES APPLING, ALFRED HARRIS, ANSEL B. PIERCE.

REMEMBER—Homestead Fertilizers have a guaranteed analysis, and are the highest excellence for Wheat, Corn and all Farm and Garden crops—have no superior for Shrubs, Trees and vines.

"HOMESTEAD" does not contain Leather-meal, Horn-meal or Shoddy, such as is often used to raise the laboratory test and commercial value in figures, but which is of no practical use in the soil, as the ammonia such things contain is not available. "Homestead" is made from Animal matter, Bone Black, Sulphuric Acid and Potash Salts. It has stood the test of years, and the best farmers use it because of its well-known worth and reliability. Test "Homestead" on a part of each field. Price per barrel of 200 pounds, \$4.00.

LAWN FERTILIZER.—Stable dressing for lawns is objectionable in appearance, odor, weed seeds, and cost. This preparation for lawns overcomes all these objectionable features and supplies the soil with the requisite food for a uniform and luxuriant growth of grass. Apply at the rate of one pound to sixteen square feet. Put up in packages as follows: Ten pounds, 50c.; 25 pounds, \$1.00; 50 pounds, \$1.75; 100 pounds, \$3.00.

PERUVIAN GUANO.—Guano is one of the most powerful stimulants for plants and growing crops. One pound of guano to twenty gallons of water will be sufficiently strong for a single watering each week, and more effectual than repeated waterings with weaker solutions. Price, 10c. per pound; 12 pounds for \$1.00; 25 pounds for \$2.00. Per bag of 200 pounds, 5c. per pound.

HOMESTEAD SUPERPHOSPHATE has been used extensively for years past and has always given the best satisfaction, in proof of which we could give thousands of testimonials. These goods have been analyzed by the various State Chemists, and stand high in point of commercial value; but above all this, it shows better and more lasting results by practical test of the farmers, which alone is the true test of worth.

SOILS.—When you come in from work at night you are apt to say, "I am completely worn out;" yet a nourishing supper and a good night's sleep make you all right again. So with worn out lands. They are not like an old plow that has to be thrown away, but like a tired horse or man, that can be restored by food and rest. Thus we find all over the country farms that were once thought to be worthless are being restored and the fences are being rebuilt, the old homesteads refitted and beautified. Yet I do not advise farmers to rely alone on phosphate, but to rotate their crops and turn under an occasional crop of clover, peas, or any green stuff, and to use all the stable manure and litter about the farm. In this way, and by using Homestead Fertilizer you will make your land better and better every year. The engraving was made from a photograph of wheat grown in Wayne Co. Mich., as the following letter shows:

GENTLEMEN.—Please notice enclosed photograph of wheat, grown on the farm of Mr. Houk, of Redford, Michigan. Each was cut from a space of ground five feet square, and put in with a nine hoe fertilizer drill seven inches apart. This is showing a less difference than the field will average. This was the third crop of wheat grown on the same ground, the

GARDEN AND FARM IMPLEMENTS.

As I have no old Implements that have been carried over from year to year, on hand, my customers can rely on getting the LATEST IMPROVED in everything.

Every Implement I send out is WARRANTED to give perfect satisfaction.

The Planet Jr. Combined Drill, Wheel Hoe, Cultivator and Plow.

The Planet Jr. Combined Drill, Wheel Hoe and Plow holds one quart. It has a finely adjustable *spring brass seed reservoir*, an *adjustable plow between the carrying and covering wheels*, the *new permanent seed index*, the *cleaner and marker*, all combining to make a perfect tool. As a *Plow* it opens furrows, covers them, hills, plows to and from, &c., &c. As a *Hoe*, it works safely and closely to and from both sides of the row at once, or between rows as plants become larger, working all rows from eight to sixteen inches wide at one passage. As a *Cultivator* it is admirably adapted to deep mellowing of the soil. The blades are tempered and polished steel. Price, \$15.00.

The Planet Jr. No. 2 Drill.

The Planet Jr. No. 2 Drill, holds $2\frac{1}{2}$ quarts. Has an *adjustable opening plow* directly between the carrying wheels. A *spring brass reservoir* which can be accurately and instantly adjusted. An *index* for the sixteen most important seeds *cast permanently on the door*. A good *marker* changeable from side to side instantly. A *cleaner* invaluable in *avoiding verminous clogging and bunching of seed*. It will sow with equal ease and accuracy, a single paper of seed or a full hopper, covering evenly at any exact depth, and will roll down and mark the next row perfectly, all at a single passage. It has no cams, levers, brushes, cogs, springs or shakers. It is *noiseless, automatic, self-cleaning, and always reliable*. Price, \$12.00.

The New York Drill.

The New York Drill has a large seed box, with a hinged cover, with a dial plate set on fulcrum, which holds close up and prevents seeds from spilling. The dial plate is in full sight of the operator, and made of patent white metal, which prevents rust or corroding. The Drill is made very compactly, and will stand up alone when not in use, and not liable to tip over. The adjustable plow, which opens a wide furrow, can be set to sow at any depth, and seed conductor is open to show seed dropping, with bars for scattering the seed in a wide furrow, which is a great help in thinning out the plants. Price, \$12.00.

The Planet Jr. Double Wheel Hoe, Cultivator and Plow Combined.

Will do the work of from six to ten men with the common hand hoe among market garden and root crops, nursery stock, &c., and is especially adapted to onion-culture. It is light, firm, strong, quickly set and easily managed; each one is sent out with all the tools shown in the cut. All the blades are tempered and polished steel. The hoes cut from six to eighteen inches wide and can be used to throw to or from the row, *working both sides at once*. The four cultivator teeth mellow the soil thoroughly. The plows are useful in opening furrows, covering and hilling. The wheels are adjustable in height and width. Price, \$10.00.

The "Fire-Fly" Single Wheel Hoe, Cultivator and Plow Combined.

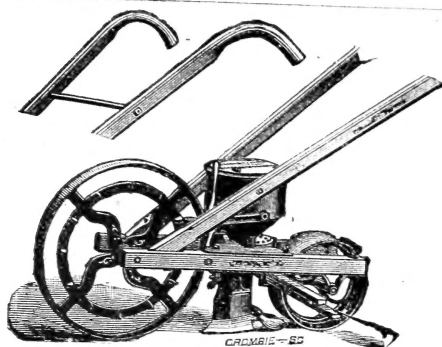
This is a new claimant for public favor. It combines lightness and strength with the greatest adjustability. Its highly polished and tempered steel tools, consist of a pair of admirable hoes which can be set to work to and from the row, and to any desired depth. A set of three reversible cultivator teeth to be used together, or singly, or in conjunction with a large and excellent garden plow. The handle is made of stiff iron, and the whole tool is strong, attractive in appearance, and capable of standing hard usage for years. Price, \$4.50.

The Fire-Fly Wheel Garden Plow.

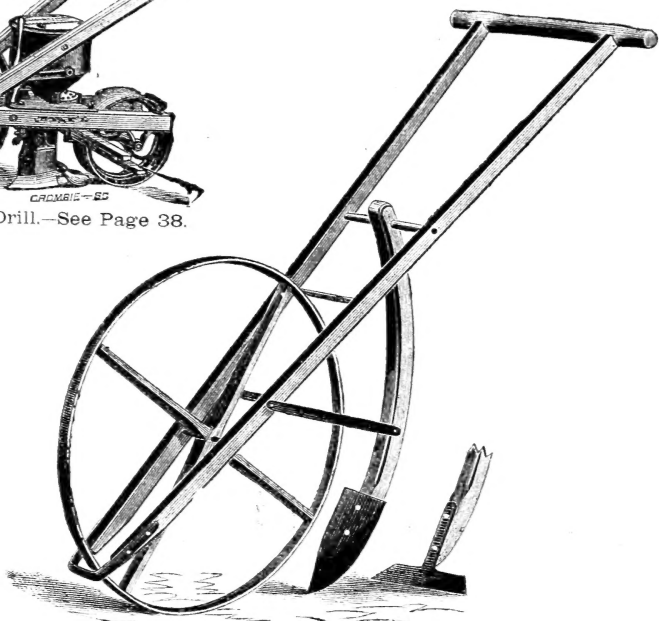
The "Firefly" Wheel Garden Plow makes the care of a vegetable garden a pleasure, and many families who could not find time to keep a garden, if attempting its cultivation with the ordinary hand hoe can raise their own vegetables successfully with the Firefly. It has a polished steel moldboard and eyes for attaching a rope in plowing double depth in the spring; it opens furrows for peas, beans, corn, potatoes, &c., and covers them. The tool can be quickly adjusted to work shallow or deep. Price, \$3.50.

The Queen of the Garden.

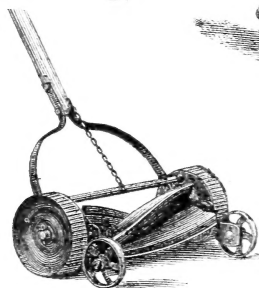
Hand Wheel Plow, Cultivator and Hoe, Combined. During the past two years the merits of this new Implement have been clearly proven; the many hundred Queens now in use in this immediate vicinity, bearing strong and convincing proof of its usefulness and labor saving qualities. Diameter of wheel 2 feet. The complete Plow weighs but 12 pounds, is well made, strong and durable and is furnished with one polished Steel Shovel $4\frac{1}{2}$ inches wide, $8\frac{1}{2}$ inches long, as shown attached to Plow in cut, which can be used for marking out land, opening furrows, covering seed, cultivating and stirring the ground generally. It can also be used for hilling up the plants.



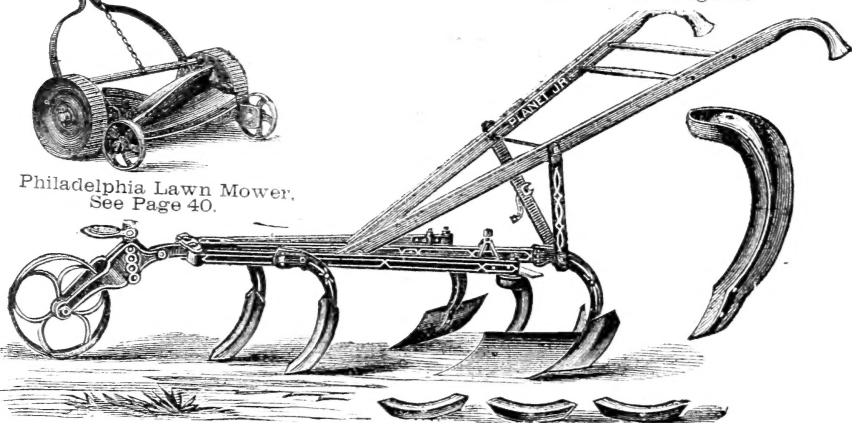
New York Drill.—See Page 38.



Queen of the Garden. Hand Wheel Plow, Cultivator and Hoe Combined.—See Page 38.



Philadelphia Lawn Mower.
See Page 40.



Planet, Jr., Horse Hoe, Cultivator, Etc., Combined.—See Page 40.

Raspberry Plants.

(Plants ordered by the dozen sent free by mail.)



GREGG RASPBERRY.

GREGG.—A comparatively new variety—wonderfully productive, very large size, hardy, fine quality and an excellent shipper. Sure to take the lead of all the known Black Caps, for either market or amateur growing.

Many bogus Greggs have been placed on the market, which have deceived many and prevented them from becoming acquainted with the merits of this, the best of all the black Raspberries. The plants I offer are from original stock, and are guaranteed as being strictly true to name. Per doz., 75c.; per 100, \$2.00.

THWACK.—A cross between the Herstine and Brandywine; berry very large; firm and productive. Very handsome fruit, that sells readily in market. One of the best shipping Red Raspberries grown. Per doz., 75c.; per 100, \$2.00.

CUTHBERT.—Is a good grower, hardy and productive; berry red, handsome, large and good quality; a profitable market variety, and excellent for family use. Per doz., 75c.; per 100 \$2.00.


RELIANCE.—Seedling of Philadelphia, but more vigorous and productive, with a very large, dark red berry, and smooth red cane. One of the best market varieties. Per doz., 75c.; per 100, \$2.00.

TURNER.—Strong grower, very hardy, productive; fruit red and excellent; highly esteemed for the table and one of the best near market varieties. Per doz., 75c.; per 100, \$1.50.

DELAWARE.—One of the finest red varieties; fruit large, handsome and of excellent quality. Not a very

strong but a good grower, and good bearer. Per dozen, 75c.; per 100, \$2.00.

SOUHEGAN.—Originated in the valley of the Souhegan River, in New Hampshire, and is new early Black Cap, hardy, very productive, ripens a week or ten days earlier than the Doolittle; its early ripening makes this berry one of the most profitable to grow. Per doz., \$1.00, per 100, \$5.00

 No order accepted for less than \$1. Special prices will be made to persons wishing to order in lots of 500 or more. The best time to set Raspberry plants is in the Fall—at any time before the ground freezes. Then, just before Winter sets in, throw a good forkful of coarse manure or litter over each hill.

Forest Tree and Hedge Seeds.

(If by mail, see Second Page of Cover.)

	1 1/4 lb.	1 lb.			
Ash—White. Transplant seedlings when one year old.....	25c	60c	Elm—Slippery.....	1.00	3.25
Ash—Green.....	50c	\$1.75	Fir—Balsam.....	75	2.35
Barberry.....	60c	2.00	Locust—Honey.....	25	75
Birch—White.....	40c	1.50	Locust—Yellow.....	25	75
Catalpa Speciosa. Hardy western variety. The most valuable for prairie planting.....	65c	2.25	Maple—Norway.....	40	1.25
Elder—Box. Rapid growth; heavy foliage, making an early shade	25c	65c	Spruce—Norway.....	25	75
			Osage Orange.....	15	50

Premiums for Every Customer.

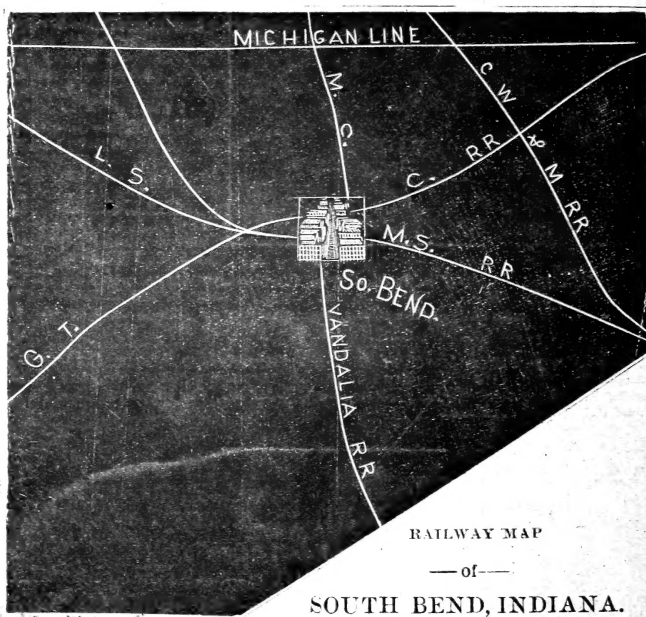
All who order of me this year may select their own premiums at the rate of 10 cents on each dollar sent, up to \$5 00. When \$5.00 and upwards are sent, you can select to 15 cents on each dollar. If you send me \$10.00 and over select premiums to 20 cents on each dollar. These Premiums do not apply to Club Orders, as Club Order Premiums are for the benefit of the persons getting up the Club.

Club Orders.

As an inducement to those who wish a great variety of choice and expensive seeds, or who take the trouble to induce their neighbors to join them in ordering, I will discount from the list as follows :

To those sending \$1 00	I will send Seeds in packets and ounces to the amount of	\$ 1 10
" " " 2 00	.....	2 25
" " " 3 00	.....	3 50
" " " 4 00	.....	4 75
" " " 5 00	.....	6 00
" " " 10 00	.....	13 00
" " " 20 00	.....	25 00

These rates refer only to Seeds in PACKETS and OUNCES. Please remember this in ordering at club rates.



The above cut shows better than can be told in words the advantages possessed by South Bend in the way of shipping facilities. Three of the great trunk lines of railroad, and the great Vandalia Route, opening the door to the whole South and Southwest, afford, with their connections, the best possible facilities.